

FLORA OF WABAUNSEE COUNTY, KANSAS

by

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INTRODUCTION

The work upon which this thesis is based was done in Wabaunsee County, Kansas, during the growing seasons of 1926-1927. It is my purpose to give in this paper a list

of the species of plants in the county with some account of their distribution, habitat and time of first flowers or fruiting.

As early as 1898, some collections were made in Wabaunsee County by J. B. Norton, G. L. Clothier and A. S. Hitchcock. Seemingly they were limited to the northern portion of the county.

GEOGRAPHY

Wabaunsee County is an area of 804 square miles situated in the eastern third of the State of Kansas, having the eastern boundary near 96° W. and extending west to just beyond $96^{\circ}30'$. The northern boundary is the Kansas River. It is extremely irregular, following the winding course of the Kansas River, the northeast corner being six miles south of the northwest corner. The south boundary is at latitude $38^{\circ}45'$ N.

The altitude varies throughout the county. Near the headwaters of Mission Creek immediately east of Keene, the altitude, according to the U. S. Geological Survey, is 1000 feet and points five miles west are 1250 feet. In the northern portion of the county at the western boundary it is recorded as 1150 feet while at Maple Hill

on the extreme eastern boundary it is 1000 feet. Samridge is 1412 feet and McFarland 1025 feet.

Streams are numerous in the county, the major one being Mill Creek. In addition there is Elm Creek and the headwaters of Locust, Elk, Chicken and Onion creeks. These smaller tributaries are dry a portion of the year. These are all, except Mill Creek, south flowing streams. The northern three-fourths of the county is well drained with quite large permanent streams flowing northeastward and emptying into the Kansas River. The main one, as mentioned before, is Mill Creek with West Branch Mill Creek, Illinois Creek, Middle and East Branch, Kehrung Creek and Winsley Creek. Four other smaller streams flow northward and empty directly into the Kansas River. The eastern part of the county is drained by Dagoon and Mission Creeks, with their respective tributaries.

GENERAL DESCRIPTION

The east and west portions of the county are undulating prairie, but the north and central portions are hilly, breaking into bluffs along streams. The valleys, ordinarily are about a mile wide. The timber belts are con-

lined exclusively to the borders of the streams and vary in width from a few rods to one-fourth of a mile. Thick ledges of limestone underlie the entire county. Thin veins of coal have been found at various places. The red granular soil, according to geologists, is of sandstone origin while the yellow clay soil is of limestone origin. Glacial drift is evident in the northern portion of the county and also comes to the surface on the east boundary of Mission creek.

Figures 1-10 following show a variety of environments with their respective plant formations and geologic sections of the county.



Fig. 1. High prairie near Maple Hill.
Photo by author, June, 1926.



Fig. 2. Flooded area south of Alma.
Photo by author, June, 1926.



FIG. 3. Tree-shrub formation on sandstone cliff
on Mission Creek east of Meene.
Photo by author, June, 1926.



FIG. 4. Open woodland of elm, walnut, oak
west of Abansee. Photo by author,
April, 1927.



Fig. 5. High prairie sloping into wooded valley southeast of Alma. Altitude 1900 feet. Photo by author, May, 1927.



Fig. 6. Rhus-Symphoricarpos association west of Wabaunsee. Photo by author, May, 1927.



FIG. 7. *Sagittaria-Elodea* association east of Wabunsee. Photo by author, June, 1927.



FIG. 8. Glacial drift as exposed on high prairie east of Wabunsee. Photo by Author, June, 1927.

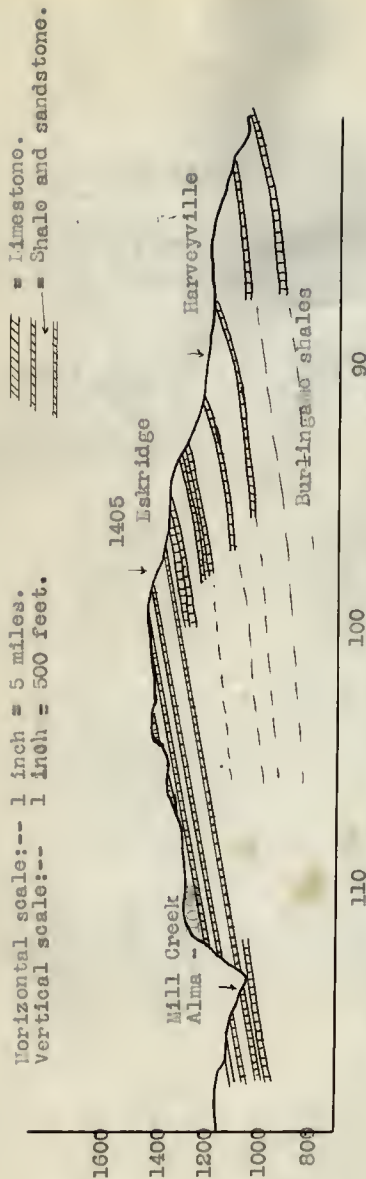


Fig. 9. Geologic section of the southern portion of Wabauisee County.
By John G. Hall.

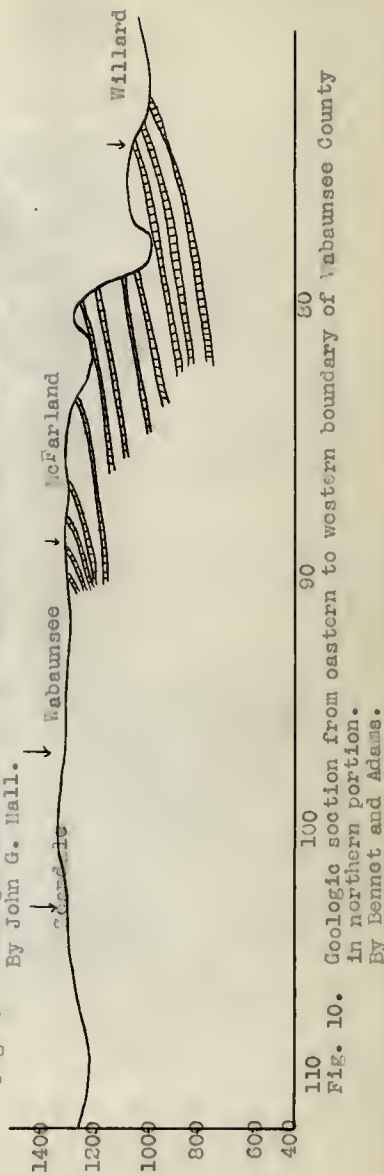


Fig. 10. Geologic section from eastern to western boundary of Wabauisee County
in northern portion.
By Bennet and Adams.

HISTORY OF THE COUNTY

Wabaunsee county has an ancient history of surpassing interest, partly printed in the old Spanish Chronicles and partly determined by archaeological evidence, the two making a record recently completed (1902) which covers a period of 500 years. In 1897, Mr. J. Brower discovered near Alma, in Mill Creek Valley, an ancient village site from which he gathered chert spearheads, arrow points, knives, scrapers and pieces of clay pots. Judge J. T. Keagy and others, associated with Mr. Brower in the work, have continued explorations and investigations until the identity of the people who inhabited this country during the pre-columbian age has been ascertained as the same people who were discovered by Coronado in 1541, at two provinces called Quivira and Marahoy, part of which constituted the prairies and valleys of Wabaunsee County, the dividing line crossing Deep Creek and Mill Creek near Volland (now Volland). (Kansas Cyclopaedia, Vol. 11, p. 350.)

Prior to 1833 the county now known as Wabaunsee County belonged to the Kaw Indians. In that year Rev.

Isaac McCoy, a missionary having charge of the location of the different Indian tribes, assisted by his son, John McCoy, surveyed a strip 20 miles in length from east to west, and 19 miles in width from north to south, for an outlet for the Shawnee Indians from their reservation to the buffalo country. This was known as the Shawnee Purchase. By a treaty with the Kaws, January 14, 1846, the Pottawatomies were granted a tract of land thirty miles square, a part of which comprised a portion of Wabaunsee County.

Wabaunsee was one of the 33 counties created by the first territorial legislature in 1855, and at that time was named Richardson. In 1859 the legislature changed the name to Wabaunsee in memory of the Pottawatomie Chief "Wabonss" signifying 'The Dawn of Day.'

The earliest permanent settlers were about 1852-54. One of the first settlers, a few miles north of the present town of Wilmington, was Henry Harvey and in 1869 a post-office was established and named Harveyville in honor of him. In 1856, the Beecher Bible and Rifle Company from Connecticut, 65 in number, exclusive of women and children, encamped May 1, 1856, on the south bank of the Kansas River where Wabaunsee now stands.

A saw-mill was purchased at Kansas City and brought to this vicinity, and as there was a good supply of timber, log cabins were soon built.

A second colony was formed by a party of Germans in Cincinnati, Ohio, who upon their arrival in Wabaunsee County selected a site near the two branches of Mill Creek and laid out the town of Alma. This colony starved out but in 1857 many settlers came directly from Germany and the first grist mill was built, also a saw-mill. The white population of Wabaunsee County at the close of 1857 was about 400.

The first railroad to enter the county was a branch of the Atchison, Topeka and Santa Fe, running from Burlingame northwest through Harveyville, Eskridge to Alma, which was built about 1880. Since then the Chicago, Rock Island and Pacific has been built entering near the northeast corner and crossing the county in a southwest direction to Alta Vista. A branch of the same system leaves the main line at McFarland and runs northwest through Wabaunsee and Manhattan. There are over 75 miles of main track in the county.

FACTORS AFFECTING NATIVE PLANT GROWTH AND THE
INTRODUCTION OF NEW SPECIES

As is indicative of the thin veins of coal that have been found in the county, geological records tell us that there must have been in geological times a luxuriant growth of plant life. (State Geological Survey of Kansas, Bull. No. 3, p. 151 and 347.)

We have no records of the nature of the flora from the archaeological investigations nor from Coronado's journey in 1541. However, it probably was of much the same character as when the Indians owned it in 1823 and when Rev. Isaac McCoy made a survey. Early travellers into Kansas leave records of the nature of the country as follows. "As we descended from the high prairie into these timber bottoms, we found thick growth of tall thrifty trees; oaks, elms, cottonwoods, sycamores mingled with hickory and ash, forming a wide grove on either side of the stream." (Boynton and Mason, 1855)

The Indians that travelled frequently over the county did not alter the plant life materially, however, they recognized certain plants which were valuable for

food and no doubt collected these to some extent.

Such animals as are reported to have been observed and many killed were the wildcat, deer, buffalo, turkey, geese, brant, bear, catamount, gray wolf, beaver, panther, muskrat, mink, grouse, skunk, jack-rabbit, buffalo fish and cat fish. All of these were able to maintain themselves either on the flesh of their kind or the plants that grew in the vicinity. Undoubtedly certain plant species were distributed more rapidly because of the animals than had their distribution been dependent upon natural invasion over the area. No record is given of the birds, which by means of migrations, made it possible for the introduction of new plant species.

The prairie fire as a factor played an important part in limiting the growth of seedlings up into the prairies. From records of items from the press and other sources, prairie fires swept thru portions of the county in the years of 1869, 1870, 1871, 1873, 1889, 1891 and in 1874 the locusts devoured foliage of every growing plant which was equally as destructive as the nearly annual prairie fires which gave the established species no chance to spread further or conquer barriers and the

introduced species no opportunity to become established.
(Matt Thomson, 1901, pp. 315-350.)

When the settlement of the earliest permanent pioneers came, it marked the beginning of a factor that had the most influence upon the introduction and destruction of species. Along with the pioneer came the responsibility of the prairie fire, the saw mill, and the introduction and cultivation of certain food plants and the destruction of others. The building of the railroads was favorable for the distribution of foreign species even from Europe. With this means of transportation and the natural facilities for cattle grazing, the Alma Signal reported in 1891 that 15,000 foreign cattle grazed in the county in that year and in the issue of the same paper on April 26, 1896, it was reported that 7,000 cattle were owned by people of the county and in addition to those nearly 20,000 head belonging to outsiders would be grazed in the vicinity of Alma. This enormous increase in numbers of cattle coming yearly into the county influences the flora by giving an opportunity for wider and more rapid distribution of native plant species as well as limiting some because of constant pasturage.

Man is chiefly responsible for the orderly growth of the Orange Orange hedges as expressed in Boynton and Mason's book, "A Journey Through Kansas," p. 72. It reads as follows: "To some, perhaps, the following statement, from one who has had experience in hedge growing, may be useful.

"Plant the seed in a nursery, with ground very carefully prepared. In the following spring (April in Kansas) transplant; cut the young plants close to the ground or 'down to the yellow bark,' and, on ground prepared with care, and to be kept free from weeds set them out in diagonal lines six inches apart, thus ----- The plants will then shoot out branches thickly, close to the ground and form an impenetrable fence, sufficient to turn any stock the third year, and which even the second year is a good defense. One quart of seed, as is said properly managed, will produce plants enough for one-fourth mile of hedge. The seed should be sowed and sprouted before planting."

In addition man brought with him seeds of other species from other parts of United States and Europe, which he placed under cultivation as soon as he could

break the virgin prairie. No doubt several of these species were exterminated because of unfavorable climatic conditions while others established themselves permanently.

Physiographic factors such as slope, or the degree to which the surface of the land departs from the level have been discussed in general under the head of Geography. Those factors that have to do with local variations in soil relations are called edaphic factors. These include the physical and chemical composition of the soil or other substratum, the degree of acidity or alkalinity. Physiographic factors which change the local conditions such as erosion, soil leaching, landslides are also of great importance in determining the plant species of a community. All of these factors have entered into the change of the flora of this county to a greater or less degree. This would present a very interesting problem from the ecological standpoint.

Two climatic factors along with type of soil determine largely the plant species of any region. The following table will express the relationship of these two factors, temperature and precipitation and the resulting plant formations.

Table I.--Showing the relation between the temperature, the amount and distribution of precipitation and the type of vegetation.

Formation	Amount of rainfall				Distribution of rainfall
	Cold	warm			
	temper-	temper-	Trop-		
	ate	ate	ics		
(a) Forest	: 20-30"	: 40-60"	: 70-80"	:	well distributed
(b) Grassland	: 10-20"	: 30-40"	: 30-70"	:	Dry winters, moist summers
(c) Sclerophyllous forest	: 10-20"	: 20-40"	: 30-70"	:	Dry summers, moist winters
(d) Desert	: 10"	: 20"	: 30"	:	Dry practically all of the time

Referring to the meteorological records of Manhattan, just to the west and the closest station with a long record, (Table No. II) it is evident that grassland is to be expected, except in the immediate vicinity of streams.

Table II.--Meteorological data for Manhattan, Filey Co., Kansas (1891-1903)

Temperature										Precipitation					Direction of prevail- ing winds
Mean	Mean of maximum	Absolute maximum	Mean of minimum	Absolute minimum	Highest	Mo. mean	Lowest	Mo. mean	Mean	No. of days pre- cipitation	Total amt. for year	Total amt. for year	Average snowfall		
Dec.	30 : 45	75	23	-16	42	20	0.8	3	0.5	0.5	2.8	SW			
Jan.	26 : 40	74	18	-26	38	12	0.3	3	0.6	0.0	4.4	SW			
Feb.	30 : 40	72	18	-32	40	18	1.1	4	1.8	0.6	7.7	SW			
Inter mean	29 : 42	75	20	-16	42	20	2.7	10	2.9	1.1	14.9	SW			
March	40 : 54	95	28	-9	51	25	1.4	4	1.5	4.0	5.0	SW			
April	54 : 71	98	44	17	62	47	2.8	6	0.1	7.5	0.7	SW			
May	64 : 78	101	54	29	70	53	4.4	9	1.1	5.7	0.0	SW			
Spring mean	53 : 68	95	42	-16	62	42	3.6	19	2.7	17.2	5.7	SW			
June	73 : 87	109	62	37	80	61	4.4	8	2.7	4.6	0.0	S			
July	78 : 91	115	66	40	87	72	4.7	8	2.1	5.7	0.0	S			
Aug.	76 : 92	110	64	40	84	70	3.5	7	2.9	10.7	0.0	SW			

Summer mean	: 76	: 90	: -----	: 64	: -----	: -----	: 12.9	: 23	:	7.7	:	21.0	:	0.0	:	S	
Sept.	: 63	: 65	: 109	: 53	: 25	: 74	: 60	: 5	:	1.3	:	3.1	:	0.0	:	SW	
										(a)							
Oct.	: 55	: 72	: 96	: 44	: 11	: 64	: 44	: 2.3	: 5	:	0.4	:	1.6	:	0.2	:	SW
Nov.	: 40	: 53	: 96	: 29	: - 9	: 49	: 31	: 1.3	: 3	:	1.6	:	1.6	:	1.2	:	SW
Autumn mean	: 54	: 70	: -----	: 44	: -----	: -----	: -----	: 3.3	: 13	:	3.3	:	6.5	:	1.4	:	SW
Annual mean	: 53	: 67	: 115	: 42	: -32	: -----	: -----	: 20.5	: 65	:	16.6	:	45.3	:	22.0	:	SW

(a) Sept. incomplete 11 days.

AREAS OF LOCAL INTEREST

There are several areas of local interest which would well bear detailed study. I'll mention two areas which I think are outstanding. In the northern and central parts of the county, where the land breaks into bluffs, usually bordering large streams, one will note that some of the hills are entirely void of trees while others support tree growth perhaps to the very top of the hill. The valleys intervening are in nearly every case heavily wooded. For the most part the soil on the hills is deficient in soil moisture and will not support tree growth while the moisture in the intervening valleys is sufficient for tree growth. However, the lack of tree growth may not be entirely due to this factor. There may be sufficient moisture on some of the hills, but because of the heavy growth of grasses, the fruits of the trees find it difficult to light in proper germinating conditions and if such is the case the tree seedling cannot compete with the tall grasses for a number of years, thus invasion into the prairie is not favorable, but not impossible. Two reasons may explain the few hills which support heavy tree growth. One

may be a matter of protection from the early prairie fires and the trees have had sufficient time to gradually invade the prairie and the second point of reasoning lies in the fact that there are in these hills several layers of limestone (pp. 3-4) and in several cases a permanent spring, which would supply sufficient moisture for the growth of trees.

The second area which is outstandingly conspicuous, is situated on a steep (150-200 ft.) north bluff directly south and west of McFarland along a branch of Mill Creek. This area is composed of a number of trees of native Junipers or red cedar and it is the only such area in the county to my knowledge. The Juniper has been protected from the prairie fires that swept thru portions of this county annually. Not only has it had the protection from fires but from animals and prairie grasses. The seedlings of Junipers have a difficult time for the first five years. They are very small and grow slowly; grasses grow over them and shade them too much, then too, they are subject to tramping by stock and pedestrians which result in their death before they are well enough established to withstand all these destructive forces. The native Junipers in this area have been in a favorable environment and have grown

to full-sized trees.

Figures 11 and 12 show distant views of this bluff at McFarland.



Fig. 11. Southeastward to bluff at McFarland on which native Junipers (*Juniperus virginiana*) are growing.
Photo by author, June, 1927.



Fig. 12. Southward to bluff at McFarland on which native Junipers are growing.
Photo by author, June, 1927.

IMPORTANT SPECIES OF POISONOUS PLANTS

Kobert (in Pammel, 1910) and other physicians define a poison as "A non-organized body, either organic or inorganic, which under certain conditions affects temporarily or permanently one or more organs of the body, when in a state of health or in a healthy condition." Such poisons may develop in the body or may come from without. Some substances act injuriously in a mechanical way, that is, they may set up disturbances by irritating some parts of the body. Other substances, while poisonous to one is entirely harmless to other persons or animals in a state of health.

Plants which cause mechanical injury are excluded from this list and only the more important plants are listed and these are listed from the standpoint of stock poisoning. With the increasing knowledge of chemistry, has grown the interest in kinds and effects of poison in plants. Factors affecting poisonous substances are light, heat, season, climate, culture, and soil.

Aesculus arguta
Apocynum cannabinum
Asclepias verticillata
Baptisia australis
Baptisia bracteata
Baptisia leucantha
Cicuta maculata
Datura stramonium
Delphinium carolinianum
Delphinium tricoeme
Delphinium virescens
Eupatorium urticaefolium
Euphorbia corollata
Euphorbia marginata
Phytolacca americana
Robinia pseudoacacia
Solanum nigrum
Zygadenus nuttallii

ANNOTATED LIST OF PLANTS OF "ABUSE" COUNTY

In the following annotated list the species are arranged in alphabetical order by families. Authority for identification is based on the 2nd edition of "Illustrated

Flora of the United States and Canada" by Britton and Brown, altho in certain cases comparisons were made with specimens in Kansas State College Herbarium.

The tabular view of the work is arranged according to Bessey's phylogenetic classification of flowering plants. He attempts a natural classification, using as a basis of his work all the characters of the plant rather than one or two characters as Linneus did in his artificial classification.

In this list are included only those species collected or observed by the author during the course of her work.

ACANTHACEAE

Ruellia ciliosa Pursh

Herb, common in moist and dry soil in sunny habitats, flowering from June to September. 20.

ACERACEAE

Acer negundo L.

Tree, common in moist soil flowering in April.
Dioecious. 129.

Acer saccharinum L.

Tree, well distributed thruout the county near farmsteads, flowering in March. 131.

AESCULACEAE

Aesculus arguta Buckl.

Shrub, frequent in damp woods, flowering in April.
146.

ALISMACEAE

Sagittaria latifolia Willd.

Herb, common in wet ravines, flowering from June. 101.

ANACARDIACEAE

Rhus glabra L.

Shrub, abundant on rocky hillslopes, flowering in
June. 29.

Rhus trilobata Nutt.

Shrub, common on rocky hillslopes. Stems when broken
produce a fetid odor. Flowers appear in March. 59.

Rhus crenata (Mill.) Greene

One shrub, on roadside 8 miles north of Harveyville
and $\frac{1}{2}$ mile east, flowering in April before the leaves
appear, sweet scented. 162.

Toxicodendron radicans (L.) Kuntze

Liana, common thruout the county in waste land and
more abundant along moist woods and old rock walls,
flowering in June.

APIACEAE

Lycium yuccaeifolium Michx.

Herb, common along dry banks and prairies, flowering
in July. 34.

Pleiotactenia nuttallii (DC.) Coult. and Rose

Herb, common on dry rocky hills, flowering in May.
55.

Cogswellia foeniculacea (Wutt.) Coult. and Rose

Herb, abundant on moist and dry prairies, flowering
in April and May. 149.

Sanicula marylandica L.

Herb, frequent in moist woods, flowering from May.
201.

Chaerophyllum texanum Coult. and Rose (?)

Herb, in moist woods flowering in April. 152.

Cicuta maculata L.

Herb, common along creeks and low ground, flowering
from June to August. 222.

APOCYNACEAE

Apocynum sibiricum Jacq.

Herb, common in waste and borders of cultivated
fields, flowering from June. 10.

ARACEAE

Arisaema dracontium (L.) Schott.

Herb, frequent in moist shaded soil, flowering in
May. 232.

ASCLEPIADACEAE

Asclepias verticillata L.

Herb, common on prairies, flowering from July to September. 278.

Asclepias tuberosa L.

Herb, common on hillsides and meadows, flowering in June. 9.

Asclepiodora viridis (alt.) Gray

Herb, common in dry soil, flowering in June. 11.

Acerates angustifolia (Nutt.) Dec.

Herb, occasional in dry soil, flowering in June. 56.

Acerates lanuginosa (Nutt.) Dec.

Rare herb, in dry soil, flowering in May. 194.

DEREERILACEAE

Podophyllum peltatum L.

Herb, occasional in southern and central part of the county in shaded moist soils, flowering in April. 143.

BIGNONIACEAE

Catalpa speciosa Warder.

Tree, commonly cultivated and escaped from cultivation, flowering in June. 185.

BORAGINACEAE

Lithospermum linearifolium Coldie

Herb, very common on dry upland soil, flowering in April. 135.

Onosmodium occidentale Mackenzie

Herb, frequent on dry rocky hill slopes, flowering in May. 174.

BRASSICACEAE

Leontodon virginicum (Tourn.) L.

Herb, very common adjacent to cultivated fields. 58.

Brassica nigra (L.) Koch.

Herb, growing in roadside ditch east of Eskridge, flowering in June. 99.

Brassica campestris L.

Herb, collected along railroad, flowering in April. 159.

Braba caroliniana Walt.

Herb, common on prairies, flowering in April. 113.

Alliaria alliaria Britton

Herb, occasional in moist waste places, flowering in April. 147.

Bursa bursa-pastoris (L.) Britton

Herb, abundant in waste places, flowering in April. 150.

Dentaria laciniata Muhl.

Herb, occasional in damp rich woods, flowering in April. 141.

Sophia plumata (Walt.) Rowell

Herb, frequent in waste grounds, flowering in April.
153.

Radicula sinuata (Nutt.) Greene

Herb, frequent in waste grounds, flowering in May.
163.

Thlaspi arvense L.

Herb, occasional in railroad stock yards, fruiting
in May. 195.

CACTACEAE

Opuntia humifusa Tourn.

Fleshy herb, frequent in dry open prairie, flowering
in June. 46.

Cactus missouriensis Sweet.

Fleshy rare herb, in dry rocky soil. One cluster
of specimens growing $2\frac{1}{2}$ miles northwest of Leavittsburg.
205.

CAMPANULACEAE

Specularia perfoliata (L.) DC.

Herb, common in moist shaded or partially sunny hab-
itat, flowering from June to September. 7.

Specularia leptocarpa (Nutt.) A.Gray

Herb, frequent in moist soils, flowering from June.
265.

Lobelia leptostachys A.DC.

Herb observed. Flowering from June.

CANNABINACEAE

Cannabis sativa L.

Herb, occasional, growing in fine moist soil, flowering in July. 116.

CAPRIFOLIACEAE

Sambucus canadensis L.

High shrub, common on rich moist soil, flowering in June. 47.

Triosteum perfoliatum L.

Herb, occasional in dry upland soil, flowering in May. 176.

Symphoricarpos symphoricarpos (L.) MacM.

Shrub, abundant in lowland pastures, flowering in July. 100.

CARYOPHYLLACEAE

Saponaria officinalis L.

Herb in partial-shade, escaped from cultivation, flowering in June. 3.

Silene antirrhina L.

Herb, frequent in dry upland soil, flowering in May. 172.

Cerastium brachypodum Engelm.

Herb, frequent in pastures and meadows, flowering in April. 156.

Silene stellata L.

Herb, frequent in moist soil, flowering from June.
261.

CASSIACEAE

Cercis canadensis L.

Tree, common in woods, flowering in April. 144.

Gleditsia triacanthos L.

Tree, common in woods, flowering in May. 242.

Gymnocladus dioica (L.) Koch.

Tree, observed, frequent in woods, flowering in May.

CELASTRACEAE

Celastrus scandens L.

Liana, common in woods twining on trees and shrubs,
flowering in May. 63.

Euonymus atropurpureus Jacq.

Herb, in moist soils, flowering in May. 206.

CHENOPODIACEAE

Chenopodium album L.

Herb, common on borders of cultivated fields, flowering from June. 106.

Salsola pestifer A. Nelson

Herb, frequent in the north and west portion of the county. A troublesome weed. 207.

COMPOSITAE

Tradescantia bracteata Small

Herb, common along moist banks, flowering from May.
179.

COMPOSITAE

Trigonotis wratensis L.

Herb, occasional in dry soil, fruiting in June. 93.

Achillea cuspidata (Pursh) D. Dietr.

Herb, frequent on upland prairies and rocky slopes,
flowering in April. 31.

Senecio platensis Nutt.

Herb, frequent in pastures and meadows, flowering
in May. 189.

Serotia oppositifolia (Naf.) Buntze

Herb, in moist pastureland, flowering in May. 169.

Lactuca floridana (L.) Gaertn.

Herb, common in moist woods, flowering from July to
September. 224.

Lactuca scariola (Lam.) Hitch.

Herb, common in moist soil, flowering in July and
August. 266.

Ratibida columnaris (Sims) D. Don.

Herb, common on dry roadsides and prairies, flowering
from June. 49.

Silphium laciniatum L.

Herb, common on dry prairies and roadsides, flowering from June. 57.

Silphium integrifolium Michx.

Herb, common in dry prairies, flowering from July. 294.

Cirsium undulatum (Nutt.) Spreng. (?)

Herb, in prairie soil, flowering from June. 75.

Liatris scariosa (L.) Hill.

Herb, frequent in prairies, flowering from August to September. 234.

Aster sericeus Vent.

Herb, occasional in dry open soil, flowering from August to September. 290.

Hieracium longipilum Torr.

Herb, occasional in prairie soil, flowering from July to September. 297.

Brauneria pallida (Nutt.) Britton

Herb, common in prairies, flowering from May to July. 277.

Brauneria purpurea (L.) Moench.

Herb, common throughout the country on the prairies, flowering from June. 50.

Chrysastrum leucanthemum L.

Herb, indigenous to localities in dry prairies, flowering in June. 19.

Achillea millefolium L.

Herb, abundant on prairies, flowering from May to June. 23.

Erigeron philadelphicus L.

Herb, in moist meadows, flowering from May. 170.

Erigeron ramosus (Walt.) D.S.P.

Herb, common in dry meadows, flowering in May and June. 190.

Mesadenia tuberosa (Wutt.) Britton

Herb, common in moist and dry soil, flowering from June. 140.

Helianthus petiolaris Wutt.

Herb, in dry waste soil, flowering from June. 108.

Artemisia ludoviciana Wutt.

Herb, common on upland prairies, flowering in August. 109.

Artemisia canasosa Britton

Herb, occasional in dry prairies flowering from July. 128.

Antennaria campestris Rydberg

Herb, common on upland prairies, flowering in April. 125.

Antennaria neglecta Greene

Herb, in open woods, flowering in April. 2.

Eochoera papposa (Vent.) Rydb.

Herb, frequent in dry prairies, flowering in May. 230.

Ambrosia elatior L.

Herb, common in dry soil, flowering from July. 91.

Ambrosia psilostachya DC.

Herb, found in wet ditches, flowering from July. 96.

Ambrosia trifida L.

Herb in river bottoms.

Xanthium americanum Walt.

Herb, abundant in waste grounds and cultivated fields, fruiting in August. 73.

Vernonia missurica Raf.

Herb, abundant in prairies, flowering in autumn. 274.

Solidago missouriensis Nutt.

Herb, common on prairies, flowering from June to October. 256.

Taraxacum vulgare Lam.

Herb in waste land.

Melanium tenuifolium Nutt.

Herb. Five plants along railroad near Wabamsee.
(Gates, No. 13535.)

CONVOLVULACEAE

Convolvulus sepium L.

Herb, common in waste grounds, flowering from June. 15.

Convolvulus repens L.

Herb, common on dry prairies and waste grounds, flowering in May and June. 171.

Ipomoea hederacea Jacq.

Herb, common in moist rich cultivated fields, flowering from July. 254.

CORNACEAE

Cornus asarifolia Michx.

Shrub, commonly grows at the borders of woods, flowering in June. 24.

CUCURBITACEAE

Pepo foetidissima HBK

Vine, frequent in dry waste soil, flowering in June. 86.

Sicyos angulatus L.

Vine, frequent in moist shaded soil, flowering from July. 226.

CUSCUTACEAE

Cuscuta sp.

Vine, frequent in low grounds, flowering in June. 186.

CYPERACEAE

Cyperus filliculmis Vahl.

Sedge, occasional in dry meadows, flowering from June to August. 268.

Scirpus atrovirens Muhl.

Sedge, common in wet ravines, fruiting in June. 258.

Scirpus pallidus (Britton) Fernald

Herb, common in wet ravines, fruit maturing in July.
85.

Scirpus lineatus Michx.

Herb, in wet ditch on upland soil. Mature fruits
in June. 95.

Eleocharis tenuis (Willd.) Schultes

Herb in wet ditch, fruits mature in June. 104.

Carex pennsylvanica Lam.

Herb, common on dry prairies, flowering in April. 122.

Carex hystericina Muhl.

Herb, in wet ravine, fruits maturing in June. 220.

Carex festucacea Schkuhr.

Herb, in dry open soils, fruiting in May. 232.

Carex stricta Lam.

Herb, in moist soil, fruiting in May. 233.

Carex vulpinoidea Michx.

Sedge, frequent in wet soil, fruiting in June. 257.

QUISETACEAE

Equisetum sp.

Herb, frequent in moist soil, fruiting in June. 214.

EUPHORBACEAE

Tithymalopsis corollata Kl. and Garcke

Herb, in upland rocky soil, fruiting in June. 111.

Tithymalopsis cymatoceras (L.) Mill

Herb, in open prairie, flowering in April. 167.

Tithymalus missouriensis (Horton) Small

Herb, in open prairie flowering in May. 61.

Dichrophyllum marginatum (Pursh) Kl. and Garcke

Herb, abundant in dry and moist soil, flowering from July to October. 271.

Croton monanthogynus Michx.

Herb, frequent in dry soil. June to Oct. 279.

Chamaesyce preslii (Guss.) Arthur

Herb, frequent in dry waste soils. 280.

FABACEAE

Robinia pseudoacacia L.

Tree, common in timber, flowering in May. 61.

Amorpha canescens Pursh

Herb, very common in dry prairie, flowering from June. 71.

Amorpha nana Nutt.

Herb, in dry upland soil, flowering in May. 207

Amorpha fruticosa L.

Herb, common in wet ditches, flowering in May. 203.

Asibomia illinoensis (Gray) Nuttze

Herb, common in dry prairie, flowering from June. 97.

Baptisia leucantha T. and G. -

Herb, common in dry prairies, flowering from June.
113.

Baptisia bracteata Ell.

Herb, common on dry prairies, flowering in April. 51.

Baptisia australis (L.) R. Br.

Herb, common in dry prairies, flowering in May. 13.

Trifolium pratense L.

Herb, frequently cultivated as a forage crop, flowering from May to September. 209.

Trifolium repens L.

Herb, common thruout county.

Petalostemon purpureum (Vent.) Rydb.

Herb, very common on dry upland prairies, flowering in June. 66.

Petalostemon candidum (Willd.) Michx.

Herb, common on dry upland prairies, flowering in June. 67.

Melilotus officinalis (L.) Lam.

Herb, abundant and widely distributed on dry waste soils, flowering from June. 69.

Helilotus alba Desv.

Herb, abundant and widely distributed on dry waste soils, flowering from June. Sometimes it is cultivated. 70.

Lespedeza capitata Michx.

Herb, frequent on prairies, flowering from August to September. 228.

Vicia sparsifolia Nutt.

Herb, occasional in dry soil, flowering in April. 42.

Medicago sativa L.

Herb, commonly cultivated, flowering from June to October.

Psoralea floribunda Nutt.

Herb, abundant in prairies, flowering from June. 35.

Psoralea argophylla Pursh.

Herb, rare in prairies, flowering from June. 79.

Psoralea esculenta Pursh.

Herb, occasional in dry prairies, flowering in May and June. 124.

Geoprumon plattense (Nutt.) Rydb.

Herb, rare in prairie, flowering in May. 223.

Geoprumon crassicaepum (Nutt.) Rydb.

Herb in prairies, flowering in April, fruit maturing in May. 130.

Glycyrrhiza lepidota Pursh.

Herb in prairie. 196.

GENTIANACEAE

Centaurium toxicum Griseb.

Herb, occasional in dry open soil, flowering in June.
21.

GERANIACEAE

Geranium carolinianum L.

Herb, common in waste ground, fruiting in June. 6.

GROSSULARIACEAE

Grossularia missouriensis (Wutt.) Cov. and Britton

Shrub, common in moist woods, flowering in April.
155.

NYCTAGINACEAE

Nyctelea nyctelea (L.) Britt.

Herb, common in damp soil usually in woodlands,
flowering in May. 177.

IRIDACEAE

Sisyrinchium canestrum Picknell

Herb, occasional in prairie, flowering in April. 248.

JUGLANDACEAE

Juglans nigra L.

Tree, common in moist soils along streams, flowering
in April. 60.

JULACEAE

Juncus dudleyi Wiegand

Herb, common in wet ravines, fruiting in June. 221.

LAMIACEAE

Ronarda fistulosa L.

Herb, abundant in moist and dry soils, flowering in June. 14.

Teucrium canadense L.

Herb, common in moist shaded soils, flowering from July. 41.

Leonurus cardiaca L.

Herb, rare in upland waste soil, flowering in May. 65.

Prunella vulgaris L.

Herb, common fields, woods and waste places, flowering from June to September. 276.

Marrubium vulgare L.

Herb, occasional in waste lands, flowering from June. 262.

Lycopus americanus Muhl.

Herb, common in wet soil. 98.

Salvia lanceifolia Poir.

Herb, frequent in dry soil, flowering in May. 134.

Scutellaria parvula Michx.

Herb, occasional in dry soil, flowering in May. 126.

Necota cataris L.

Herb, in moist soil, flowering in June. 142.

Sedona hispida Pursh.

Herb, in dry stony soil, flowering in June. 234.

LILIACEAE

Smilax hispida Wuhl.

Liana, common in woods. 105.

Smilax herbacea L.

Liana, in moist woods. 68.

Erythronium mesochorum Knerr.

Herb, common near woods, flowering in March. 120.

Erythronium albidum Nutt.

Herb, common on upland soils, flowering in April. 131.

Erythronium americanum Ker.

Herb, common in rich moist woods, flowering in April.
145.

Allium canadense L.

Herb common in prairies, flowering in May. 217.

Zygadenus nuttallii Gray

Herb, common in prairies, flowering in May. 178.

Nothoscordum bivalve (L.) Britton

Herb, frequent in prairies, flowering in April. 136.

Asparagus officinalis L.

Shrub, rare in open soils, escaped from cultivation.
Fruits mature in autumn. 204.

Polygonatum commutatum (R. and S.) Dietr.

Herb, common in moist woods, flowering in May. 241.

LILIACEAE

Lilium sulcatum (Mittle) Small

Herb, common on open prairies, flowering in June and July. 28.

MALVACEAE

Callirhoe involucrata (T. and G.) Gray

Herb, common in variable soils, flowering from June.
1.

Callirhoe digitata Nutt.

Herb, frequent on rocky hillslopes, flowering in May.
133.

Callirhoe alceoides (Michx.) A. Gray

Herb, common in dry prairies, flowering in May. 250.

Callirhoe triangulata Leavenw.

Herb, in prairie soil, flowering in May. 200.

Abutilon abutilon (L.) Rusby

Herb, in low rich grounds, flowering from June. 80.

Fibiscus trionum L.

Herb, common in waste places, flowering from August to September 201.

MALACEAE

Crataegus sp.

Tree, occasional in woods, flowering in April. 151.

MISPERACEAE

Menispermum canadense L.

Vine, abundant in moist woods, flowering in May. 45.

MIMOSACEAE

Coronilla uncinata Willd.

Herb, common in dry prairie soils, flowering from June. 8.

MOPACEAE

Toxylon beniferrum Raf.

Tree, frequent in dry and moist soils. Introduced as defense against stock in the early days. 192.

Lorus rubra L.

Tree, occasional on upland soils, fruiting in June. 192.

Morus alba L.

Tree, occasional on upland soil, fruiting in June.
253.

NYCTAGINACEAE

Allionia nyctaginea Michx.

Herb, very common on moist and dry soils, flowering
in May. 82.

Allionia linearis Pursh.

Herb, common in dry soil, flowering in June. 94.

OMNOTHACEAE

Oenothera missouriensis Sims.

Herb common in dry open soils, flowering in May. 16.

Oenothera serrulata (Patt.) Walp.

Herb, common in open prairies, flowering in June. 199.

Oenothera linifolia (Patt.) Britton

Herb, occasional in open soils, flowering in June.
52.

Oenothera laciniata (Mill) Rose

Herb, occasional in sandy soil, flowering in May.
133.

Oenothera albicollis (Pursh) Britton

Herb, frequent in sunny habitat, flowering from May.
233.

Oenothera biennis L.

Herb, common on dry banks, flowering from June. 295.

Chamaenerion angustifolium (L.) Scop.

Erect herb, common in open prairies, flowering from June to September. 275.

ONAGRAE

Fraxinus americana L.

Tree, common in moist woods, fruiting in May. 252.

Fraxinus pennsylvanica Marsh.

Tree, in moist soil. Dioecious. 246.

Fraxinus pennsylvanica lanceolata (Borkhausen) Bergent.

Tree, in low ground and planted as an ornamental.

OXALIDACEAE

Oxalis cymosa Small

Herb, common in dry waste soils, flowering in June. 27.

Oxalis violacea (L.) Small

Herb, abundant in dry rocky soil, flowering in April. White flowers are rare. 163.

Oxalis stricta L.

Herb, common in open soils, flowering in April. 43, 269.

PAPAVACEAE

Argemone intermedia Sweet

Milky herb, rare in open sandy soil, flowering in June. 48.

Cannoides micranthum (Engelm.) Britton

Herb, common in low damp woods and roadsides, flowering in April. 160.

Bicuculla cucullaria (L.) Millsp.

Herb, in rich woods, flowering in April. 130.

PHYTOLACCACEAE

Phytolacca americana L.

Herb, common in moist rich woods, flowering in June and July. 77.

PITACEAE

Tsuga orientalis L.

Tree, rarely cultivated in farmyards and cemeteries. 165.

Juniperus virginiana L.

Tree, common in farmyards and along moist bluffs and a few specimens along limestone ledges. 249.

Pinus sylvestris Ait.

One tree cultivated in cemetery east of Wabaunsee. 103.

PLANTAGINACEAE

Plantago lanceolata L.

Herb, common in dry waste soils. 78.

Plantago virginica L.

Herb, in dry soil, flowering in May. 202.

Plantago media L.

Herb, common in sun-plant formation, flowering in May. 218.

Plantago purshi R. and S.

Herb, in sunny habitat, flowering in June. 220.

PLATANACEAE

Platanus occidentalis L.

Tree frequent along streams. 43.

POACEAE

Tripsacum dactyloides L.

Grass, common thruout the county in moist habitats, flowering in June. 84.

Agropyron smithii Rydb.

Grass, in moist soil, mature fruits in July. 247.

Bromus japonicus Thunb.

Grass, abundant on dry waste ground. 89.

Plymus virginicus L.

Grass, common in moist soils, fruiting in July. 110.

Phleum pratense L.

Grass, occasionally cultivated.

Poa pratensis L.

Grass in lawns and generally escaped, fruiting in June.

Poa compressa L.

Grass abundant in dry and moist soils.

Po. inochloa crusgalli L. Beauv.

Grass, in farmyards and waste places. August to September. 272.

Lordealum jubatum L.

Grass, occasional in dry soil. June to August. 193.

Bulbilis dactyloides (Nutt.) Raf.

Grass, frequent in prairies. 203.

Agrostis hyemalis (Walt.) B.S.P.

Grass, frequent in wet ravines. June to August. 180.

Moeloria cristata Pers.

Grass, frequent in cultivated fields. 211.

Panicum scribnerianum Nash.

Grass, frequent in open soils, fruiting in May. 236.

POLEMONIACEAE

Phlox divaricata L.

Herb, common in damp rich woods, flowering in April. 40.

POLYGONACEAE

Rumex crispus L.

Herb, common in low moist wastes. 87.

Rumex britannica S. Wats.

Herb, common in low waste grounds. 88.

Rumex altissimus Wood.

Herb, common in moist grounds, flowering in May. 210.

Polygonum aviculare L.

Herb, common in dooryards and waste. 90.

Polygonum pennsylvanicum L.

Herb, common in moist waste soil, flowering from July to September. 239.

Polygonum virginianum L.

Herb, frequent in moist woods, flowering from July. 292.

Polygonum tenue Michx.

Herb, occasional in wastes. July-Sept. 273.

Polygonum convolvulus L.

Herb, occasional in dry open soil. June to July. 286.

Polygonum erectum L.

Herb, in waste soils.

POLYPODIACEAE

Pellaea atropurpurea (L.) Link.

Herb, common in northern part of the county on limestone ledges. 154.

PRIMULACEAE

Androsace occidentalis Pursh.

Herb, abundant in upland prairies, flowering in March and April. 124.

Steironoma ciliatum (L.) Raf.

Herb, frequent in moist waste, flowering from June to August. 285.

PRUNACEAE

Prunus americana Marsh

Shrub, common in wastes, flowering in April. 231.

Prunus virginiana (L.) Mill.

Shrub, common in moist soil, flowering in April. 53.

RANUNCULACEAE

Delphinium virescens Nutt.

Herb, common in upland soil, flowering in June. 18.

Delphinium tricornis Michx.

Herb, in moist soil, flowering in May. 197.

Anemone decapetala Ard.

Herb, common on upland prairies, flowering in April. Colors range from bluish purple to white. 126.

Ranunculus abortivus L.

Herb, common in damp woods, flowering in April. 143.

Thalictrum dioicum L.

Herb, in moist woods, flowering in June. 64.

Vicinia pitcheri (T. & G.) Britton

Vine, occasional in moist soils, flowering from June. 225.

RHAMNACEAE

Ceanothus ovatus Desf.

Low shrub, frequent on rocky slopes, flowering in May. 33.

var. pubescens

Low shrub, on rocky hill slope. 107.

Ceanothus americanus L.

Shrub, frequent on rocky hill slopes, flowering in June. 112.

Rhamnus lanceolata Pursh.

Shrub, common in waste grounds, fruiting in June. 225.

ROSACEAE

Rosa arkansana Greene

Shrub, frequent along roadsides, flowering in June. 187.

Rosa woodsii

Shrub, flowering in May. 215.

Rosa blanda Lindl.

Shrub, occasional in sunny habitats, flowering in May. 245.

Fragaria virginiana Duchesne

Herb, common in moist soil, flowering in April. 251.

RUBIACEAE

Houstonia minima Beck.

Small herbaceous plant in dry prairie, reported to be extremely abundant east of Emporia in the spring season of 1927. I also collected specimens in Riley county this same spring. 128.

Galium ciraezans Michx.

Herb, common in damp woods, fruiting in May. 175.

Galium aparine L.

Herb, frequent in damp woods, flowering in May. 173.

Symphoricarpos symphoricarpos (L.) Mac.

Shrub, abundant in moist soils, flowering in July. 100.

RUTACEAE

Zanthoxylum americanum Mill.

Shrub, occasional on rocky hillslopes and woods, flowering in April before the leaves appear. 132.

SALICACEAE

Populus italica Moench.

A rare cultivated tree. 191.

Populus alba L.

A rare cultivated tree. 237.

Populus sargentii Dode

Tree, common in moist soil. 244.

Salix longifolia Muhl.

Tree, common along Kansas River.

SANTALACEAE

Comandra pallida A. DC.

Herb, rare on upland soil, flowering in May. 12.

SCOPHULARIACEAE

Pentstemon cobaea Nutt.

Herb, common in dry prairies, flowering in June. 60.

Pentstemon grandiflorus Nutt.

Herb, frequent on dry prairies, flowering in May. 212.

Verbascum thapsus (Tourn.) L.

Herb, common in dry prairies, flowers in July. 44.

Limulus meyeri Torr.

Herb, below permanent spring. Rare, flowering in May. 210.

Veronica peregrina L.

Herb, occasional in moist soil, flowering in May. 291.

SIMARUBACEAE

Ailanthus altissima (Miller) Swingle

Tree, escaped from cultivation. 57.

SOLANACEAE

Solanum carolinense L.

Herb, common in dry and moist soils, flowering in July. 5.

Solanum rostratum Dunal.

Herb, very common in waste soils, flowering in June. 4.

Datura stramonium L.

Fleshy herb, common in moist rich soil, flowering from June to September. 26.

STAPHYLEACEAE

Staphylea trifolia L.

Shrub, occasional on the borders of woods, flowering in April. 155.

TYPHACEAE

Typha latifolia L.

Herb, common along creeks and in ponds, fruiting from August to September. 285.

ULMACEAE

Ulmus fulva Michx.

Tree, common in timber. 54.

Ulmus americana L.

Tree, common in moist soil, flowering in March and April. Samaras ripe in May. 270.

Celtis occidentalis L.

Tree, common in open woodland. 32.

URTICACEAE

Urtica gracilis Ait.

Herb, abundant in moist waste soils.

VERBENACEAE

Verbena stricta Vent.

Herb, very common in dry and moist soil, flowering from July to September. 30.

Verbena canadensis (L.) Britton

Herb, occasional in dry rocky soil, flowering in April. 36.

Verbena angustifolia Michx.

Herb in prairie.

VIOLACEAE

Viola rafinesquii Greene

Herb, abundant in upland meadows, flowering in April.
127.

Viola pedatifida G. Don.

Herb, very common in upland prairie soil, flowering
in April. 127.

Viola palmata L.

Herb, on dry rocky hillslopes, flowering in April.
123.

Viola eriocarpa Schwein.

Herb, common in moist woods, fruit mature in May. 161.

Viola pepilionacea Pursh.

Herb, in moist woods. Fruit mature in May. 157.

VITACEAE

Parthenocissus quinquefolia L. Planch.

Liana, abundant in moist soils in woods and along
fences, fruiting in August. 114.

Vitis vulpina L.

Liana, frequent in rich woods and borders of cultivated fields, flowering in April. 115.

Vitis palmata Vahl.

Liana, occasional in moist grounds. 193.

Vitis cordifolia Michx.

Liana, occasional in moist soil. 264.

TABULAR VIEW OF FAMILIES OF FERNS AND SEED PLANTS
TREATED IN THIS PAPER

Orders and families	: Species		Additional
	: collected	: or observed	
	: by author	: reported by	: Hitchcock
Order Ophioglossales	:	:	
Family Ophioglossaceae	:	:	1
Order Filicales	:	:	
Family Polypodiaceae	:	1	:
Order Equisetales	:	:	
Family Equisetaceae	:	1	:
Order Coniferales	:	:	
Family Pinaceae	:	3	:
Order Alismatales	:	:	
Family Alismataceae	:	1	: 1
Family Typhaceae	:	1	:
Order Liliales	:	:	
Family Liliaceae	:	10	: 1
Family Commelinaceae	:	1	: 2
Family Juncaceae	:	1	: 1
Order Arales	:	:	
Family Araceae	:	1	:

Order Poales	:	:
Family Cyperaceae	:	10 : 7
Family Poaceae	:	13 : 25
Order Iridales	:	:
Family Iridaceae	:	1 : 1
Order Ranales	:	:
Family Anonaceae	:	: 1
Family Ranunculaceae	:	6 : 3
Family Berberidaceae	:	1 :
Family Menispermaceae	:	1 :
Order Malvales	:	:
Family Malvaceae	:	6 : 3
Family Tiliaceae	:	: 1
Family Ullaceae	:	3 :
Family Moraceae	:	3 :
Family Cannabinaceae	:	1 :
Family Urticaceae	:	1 : 2
Order Geraniales	:	:
Family Geraniaceae	:	1 :
Family Oxalidaceae	:	3 :
Family Linaceae	:	1 :
Family Balsaminaceae	:	: 1
Family Rutaceae	:	1 :

Family Simarubaceae	:	1	:
Family Polygalaceae	:		: 1
Family Euphorbiaceae	:	6	: 11
Order Guttiferales	:		:
Family Hypericaceae	:		: 1
Family Violaceae	:	5	: 2
Order Brassicales	:		:
Family Papaveraceae	:	3	: 2
Family Brassicaceae	:	10	: 8
Order Caryophyllales	:		:
Family Caryophyllaceae	:	4	:
Family Aizoaceae	:		: 1
Family Portulacaceae	:		: 1
Family Salicaceae	:	4	: 3
Family Phytolaccaceae	:	1	:
Family Amaranthaceae	:		: 5
Family Chenopodiaceae	:	2	: 6
Family Polygonaceae	:	10	: 7
Family Nyctaginaceae	:	2	: 1
Order Primulales	:		:
Family Primulaceae	:	2	:
Family Plantaginaceae	:	4	: 2

Order Polemoniales	:	:	
Family Polemoniaceae	:	1	:
Family Convolvulaceae	:	3	: 3
Family Cuscutaceae	:	1	: 1
Family Hydrophyllaceae	:	1	: 1
Family Boraginaceae	:	1	: 2
Family Solanaceae	:	3	: 6
Order Gentianales	:	:	
Family Oleaceae	:	3	:
Family Gentianaceae	:	1	: 1
Family Apocynaceae	:	1	: 1
Family Asclepiadaceae	:	5	: 2
Order Scrophulariales	:	:	
Family Scrophulariaceae	:	5	: 4
Family Bignoniaceae	:	1	:
Family Orobanchaceae	:	:	: 1
Family Acanthaceae	:	1	: 2
Order Lamiales	:	:	
Family Phrymaceae	:	:	: 1
Family Verbenaceae	:	3	: 5
Family Lamiaceae	:	10	: 4
Order Rosales	:	:	
Family Rosaceae	:	4	: 6

Family Malaceae	:	1	:	
Family Prunaceae	:	2	:	
Family Mimosaceae	:	1	:	1
Family Cassiaceae	:	3	:	1
Family Fabaceae	:	23	:	7
Family Grossulariaceae	:	1	:	
Family Crassulaceae	:		:	1
Family Platanaceae	:	1	:	
Order Myrtales	:		:	
Family Lythraceae	:		:	1
Family Oenotheraceae	:	6	:	3
Order Cactales	:		:	
Family Cactaceae	:	2	:	
Order Loasales	:		:	
Family Loasaceae	:		:	1
Family Cucurbitaceae	:	2	:	
Order Celastrales	:		:	
Family Rhamnaceae	:	2	:	
Family Vitaceae	:	4	:	2
Family Celastraceae	:	2	:	
Family Staphyleaceae	:	1	:	
Family Santalaceae	:	1	:	1
Order Sapindales	:		:	
Family Aesculaceae	:	1	:	

Family Aceraceae	:	2	:	
Family Anacardiaceae	:	4	:	
Family Juglandaceae	:	1	:	1
Family Betulaceae	:		:	1
Family Fagaceae	:	2	:	1
Order Umbellales	:		:	
Family Apiaceae	:	6	:	2
Family Cornaceae	:	1	:	
Order Rubiales	:		:	
Family Rubiaceae	:	3	:	4
Family Caprifoliaceae	:	3	:	
Order Campanulales	:		:	
Family Campanulaceae	:	3	:	1
Order Asterales	:		:	
Family "Compositae"	:	34	:	26

GENERAL CONSIDERATION OF THE FLORA OF THE COUNTY

In considering the flora of Wabaunsee County in its entire aspect one may say that the flora of the county has changed very materially since the establishment of per-

manent homes with respect to the numbers of individuals of certain species. It would be difficult to say with certainty whether or not species as a whole have increased or decreased in numbers or whether new species have merely replaced the old ones and the number is nearly the same. One fact is very evident with respect to its flora. On virgin prairie, where neither cultivation nor pasturage has been permitted, bright colored flowers are conspicuous. Where cultivation occurs plants of economic value have displaced the prairie, while in the case of areas that are pastured, one no longer finds the display of prairie flowers. Grasses are able to withstand cropping and spread without seed formation while other plants are crowded out. There may not be a great difference in number of species but a vegetation differing in appearance.

The variety of environments throout the county, that is, high prairie, wet ravines, springs, and woods make it very favorable for a diversity in types of species.

Up to date 477 species have been reported from the county. The 19 families which have the largest number of species are:

Compositae	60 species
Poaceae	38 "

Leguminosae	30	species
Brassicaceae	13	"
Polygonaceae	17	"
Euphorbiaceae	17	"
Cyperaceae	17	"
Lamiaceae	14	"
Liliaceae	11	"
Rosaceae	10	"
Ranunculaceae	9	"
Oenotheraceae	9	"
Solanaceae	9	"
Oenotheraceae	9	"
Scrophulariaceae	9	"
Malvaceae	9	"
Verbenaceae	8	"
Chenopodiaceae	8	"
Apiaceae	8	"

To compare my work with that done up to 60 years ago, the following three lists were made, namely;

1. Species not listed by A.S. Hitchcock in 1899 which I have collected.

2. Species reported by both A.S. Hitchcock (1899) and myself.

3. Species reported by A.S. Hitchcock which I did not collect.

List No. 1.--Species not listed by A.S. Hitchcock in 1899 which I have collected.

Species	Collection Number
<i>Acer saccharinum</i>	109
<i>Acerates angustifolia</i>	56
<i>Acerates lanuginosa</i>	104
<i>Agropyron smithii</i>	247
<i>Agroseris cuspidata</i>	31
<i>Agrostis hyemalis</i>	100
<i>Ailanthus altissima</i>	37
<i>Alliaria alliaria</i>	147
<i>Allionia linearis</i>	94
<i>Allium canadense</i>	217
<i>Amorpha nana</i>	207
<i>Anogra albicaulis</i>	235
<i>Antennaria neglecta</i>	2
<i>Apocynum sibiricum</i>	10
<i>Argemone intermedia</i>	43
<i>Arisaema dracontium</i>	233
<i>Artemisia kansana</i>	108
<i>Artemisia ludoviciana</i>	109

<i>Asparagus officinalis</i>	204
<i>Brassica campestris</i>	159
<i>Brassica nigra</i>	99
<i>Brauneria purpurea</i>	50
<i>Bromus japonicus</i>	89
<i>Bulbilla dactylodes</i>	203
<i>Bursa bursa-pastoris</i>	150
<i>Cactus missouriensis</i>	205
<i>Callirhoe digitata</i>	133
<i>Callirhoe involucrata</i>	1
<i>Callirhoe triangulata</i>	200
<i>Capnoides alicanthum</i>	160
<i>Carex pennsylvanica</i>	122
<i>Carex stricta</i>	233
<i>Catalpa speciosa</i> (cult.)	135
<i>Ceanothus americanus</i>	112
<i>Ceanothus ovatus</i>	107
<i>Centaureum texense</i>	21
<i>Cerastium brachypodum</i>	156
<i>Chacrophyllum texanum</i> (?)	132
<i>Chenopodium album</i>	106
<i>Comandra pallida</i>	12
<i>Convolvulus repens</i>	171

<i>Cornus asperifolia</i>	24
<i>Crataegus</i> sp.	151
<i>Dolphinsium virescens</i>	18
<i>Dentaria lacinata</i>	141
<i>Draba caroliniana</i>	118
<i>Eleocharis tenuis</i>	104
<i>Elymus virginicus</i>	110
<i>Equisetum</i> sp.	214
<i>Erigeron philadelphicus</i>	170
<i>Eryngium yuccaeifolium</i>	34
<i>Erythronium albidum</i>	131
<i>Fragaria virginiana</i>	251
<i>Fraxinus americana</i>	252
<i>Geoprumon plattense</i>	223
<i>Geranium carolinianum</i>	6
<i>Helenium tenuifolium</i> (Gates 13585)	
<i>Houstonia minima</i>	138
<i>Humulus lupulus</i>	227
<i>Juncus dudleyi</i>	221
<i>Koeleria cristata</i>	211
<i>Leonurus cardiaca</i>	65
<i>Lepidium virginicum</i>	93
<i>Mimulus geyeri</i>	219

<i>Morus alba</i>	255
<i>Nothoscordum bivalve</i>	136
<i>Onosmodium occidentale</i>	174
<i>Onalis cymosa</i>	27
<i>Pellaea atropurpurea</i>	154
<i>Pentstemon grandiflorus</i>	212
<i>Phlox divaricata</i>	40
<i>Phytolacca americana</i>	77
<i>Pinus sylvestris</i> (Cult.)	103
<i>Plantago lanceolata</i>	78
<i>Plantago media</i>	218
<i>Plantago virginica</i>	202
<i>Polygonum aviculare</i>	90
<i>Populus alba</i> (Cult.)	237
<i>Populus italica</i> (Cult.)	101
<i>Populus sargentii</i>	244
<i>Radicula sinuata</i>	108
<i>Raietannia laciniata</i>	138
<i>Ranunculus abortivus</i>	146
<i>Rhus trilobata</i>	50
<i>Rosa blanda</i> (?)	245
<i>Rosa woodsii</i>	215
<i>Rumex britannica</i>	68

<i>Scirpus pallidus</i>	65
<i>Senecio platensis</i>	33
<i>Serelia oppositifolia</i>	160
<i>Sisyrinchium campestre</i>	248
<i>Smilax herbacea</i>	63
<i>Smilax hispida</i>	105
<i>Sophia pinnata</i>	153
<i>Specularia leptocarpa</i>	265
<i>Teucrium canadense</i>	41
<i>Thalictrum dioicum</i>	64
<i>Thlaspi arvense</i>	195
<i>Thuja orientalis</i> (Cult.)	165
<i>Tithymalopsis cyparissias</i>	167
<i>Tithymalopsis missouriensis</i>	216
<i>Toxylon periferum</i> (cult.)	182
<i>Tradescantia bracteata</i>	170
<i>Tragopogon pratense</i>	93
<i>Triosteum perfoliatum</i>	176
<i>Verbascum thapsus</i>	44
<i>Vicia sparsifolia</i>	42
<i>Viola palmata</i>	157
<i>Viola rafinesquii</i>	127

<i>Vitis palmata</i>	198
<i>Zanthoxylum americanum</i>	132
<i>Zygadenus nuttallii</i>	170

Referring to List number 1, it does not mean that because these species were not reported by Hitchcock that they were not in the county, for example, the osage orange *Torilgon pomiferum*, was introduced into the county in early pioneer days but Mr. Hitchcock does not include it in his list and even again maple trees (*Acer saccharinum*) are well over 40 years of age. In the case of the cultivated plants which are few in number and are cultivated for ornamental purposes primarily, these may not all have been cultivated at that time, however, it is quite likely that *Pinus sylvestris* and *Catalpa speciosa* were, basing my judgment on the size of the trees I observed and knowing that they do not grow rapidly. As far as the other species are concerned it would be safe to say that several have migrated into the county from the west or east. I have observed the *Argemone intermedia* only at the extreme western boundary of the county. It has probably migrated to that point from the west as 15 miles west the plant is quite abundant in waste ground.

Cactus missouriensis is not abundant in the county as I observed it in only one locality northwest of Eskridge. It too, is probably a migrant from the west.

List No. 2.--Species reported by both A.S. Hitchcock (1909)
 and the writer. (The collection numbers are
 those of the writer in 1926-27.)

Species	Collection Number
<i>Abutilon abutilon</i>	80
<i>Acer negundo</i>	181
<i>Achillea millefolium</i>	23
<i>Aesculus arguta</i>	146
<i>Allionia nictagineus</i>	82
<i>Amorpha canescens</i>	71
<i>Amorpha fruticosa</i>	206
<i>Androsace occidentalis</i>	124
<i>Anemone decapetala</i>	126
<i>Antennaria campestris</i>	125
<i>Asclepias tuberosa</i>	9
<i>Asclepias verticillata</i>	273
<i>Asclepidora viridis</i>	11
<i>Baptisia australis</i>	13
<i>Baptisia bracteata</i>	51
<i>Baptisia leucantha</i>	113
<i>Eleucalla cucullaria</i>	139
<i>Erauneria pallida</i>	277
<i>Callirhoe alceoides</i>	250

<i>Cannabis sativa</i>	116
<i>Carex festucacea</i>	232
<i>Carex hystericina</i>	229
<i>Carex vulpinoidea</i>	257
<i>Ceanothus ovatus pubescens</i>	107
<i>Celastrus scandens</i>	63
<i>Celtis occidentalis</i>	32
<i>Cercis canadensis</i>	144
<i>Chamaecybe persicii</i>	230
<i>Chrysanthemum leucanthemum</i>	19
<i>Cicuta maculata</i>	282
<i>Cirsium undulatum</i> (?)	75
<i>Convolvulus sepium</i>	15
<i>Croton monanthogynus</i>	279
<i>Cyperus filiculmis</i>	268
<i>Datura stramonium</i>	26
<i>Delphinium tricorne</i>	197
<i>Dichrophyllum marginatum</i>	271
<i>Draba cuneifolia</i>	119
<i>Dyssodia papposa</i> (<i>Boebera pa-</i>)	230
<i>Equisetum arvense</i> (?)	
<i>Erigeron ramosus</i>	190
<i>Euonymus atropurpurens</i>	206

<i>Euthronium mesochoreum</i>	129
<i>Fraxinus pennsylvanica lanceolata</i>	246
<i>Galium aparine</i>	173
<i>Galium circaeasans</i>	175
<i>Gaura biennis</i>	
<i>Geoprimum crassicaupum</i>	130
<i>Gleditsia trinanthos</i>	242
<i>Glycyrrhiza lepidota</i>	193
<i>Gymnocladus dioica</i>	
<i>Hedeoma pinnatifida</i>	254
<i>Heliopsis scabra</i>	103
<i>Hibiscus trionum</i>	231
<i>Hordeum jubatum</i>	193
<i>Ipomoea hederacea</i>	254
<i>Juncus nigra</i>	60
<i>Juniperus virginiana</i>	249
<i>Lactuca floridana</i>	224
<i>Lespedeza capitata</i>	230
<i>Liatris scariosa</i>	234
<i>Linum sulcatum</i>	23
<i>Lithospermum linearifolium</i>	153
<i>Lobelia leptostachya</i>	
<i>Lycopus americanus</i>	90

<i>Medicago sativa</i>	
<i>Megapterium missouriense</i>	16
<i>Meibomia illinoensis</i>	97
<i>Melilotus alba</i>	70
<i>Melilotus officinalis</i>	69
<i>Menispermum canadense</i>	45
<i>Mesadenia tuberosa</i>	140
<i>Monarda fistulosa</i>	14
<i>Moroneia uncinata</i>	8
<i>Morus rubra</i>	102
<i>Nepeta cataria</i>	142
<i>Nyctelca nyctelca</i>	177
<i>Oenothera serrulata</i>	17
<i>Opuntia humifusa</i>	46
<i>Oxalis stricta</i>	39
<i>Oxalis violacea</i>	
<i>Panicum scribnerianum</i>	236
<i>Parthenocissus quinquefolia</i>	114
<i>Pontstemon cobaea</i>	25
<i>Pepo foetidissima</i>	86
<i>Petalostemon candidum</i>	67
<i>Petalostemon purpureum</i>	66
<i>Phleum pratense</i>	

<i>Plantago purshii</i>	220
<i>Platanus occidentalis</i>	43
<i>Poa compressa</i>	
<i>Podophyllum peltatum</i>	143
<i>Polygonatum commutatum</i>	241
<i>Polygonum erectum</i>	
<i>Polygonum convolvulus</i>	286
<i>Polygonum pennsylvanicum</i>	239
<i>Polygonum lapathifolia</i>	288
<i>Polygonum virginianum</i>	292
<i>Polygonum tenue</i>	273
<i>Plectraenia nuttallii</i>	55
<i>Prunella vulgaris</i>	276
<i>Prunus americana</i>	231
<i>Prunus virginiana</i>	53
<i>Psoralea argophylla</i>	79
<i>Psoralea esculenta</i>	184
<i>Psoralea floribunda</i>	35
<i>Quercus macrocarpa</i>	117
<i>Quercus muhlenbergii</i>	
<i>Ratibida columnaris</i>	40
<i>Rhamnus lanceolata</i>	255
<i>Rhus canadensis</i>	102
<i>Rhus glabra</i>	29

<i>Ribes gracile</i> (<i>Grossularia missouriensis</i>)	155
<i>Robinia pseudoacacia</i>	61
<i>Rosa pratincola</i>	187
<i>Ruellia ciliosa</i>	20
<i>Rumex altissimus</i>	210
<i>Rumex crispus</i>	87
<i>Sagittaria latifolia</i>	101
<i>Salix longifolia</i>	
<i>Salvia lanceifolia</i>	134
<i>Sambucus canadensis</i>	47
<i>Sanicula marylandica</i>	201
<i>Saponaria officinalis</i>	3
<i>Scutellaria parvula</i>	135
<i>Sicyos angulatus</i>	226
<i>Silene antirrhina</i>	172
<i>Silene stellata</i>	261
<i>Silphium laciniatum</i>	57
<i>Solanum carolinense</i>	5
<i>Solanum rostratum</i>	4
<i>Solidago missouriensis</i>	256
<i>Specularia perfoliata</i>	7
<i>Stephylea trifolia</i>	153
<i>Steironema ciliatum</i>	285

<i>Stenosiphon linifolium</i>	52
<i>Symphoricarpos symphoricarpos</i>	100
<i>Taraxacum vulgare</i>	
<i>Tithymalopsis corollata</i>	111
<i>Trifolium pratense</i>	209
<i>Trifolium repens</i>	
<i>Tripsacum dactyloides</i>	84
<i>Typha latifolia</i>	283
<i>Ulmus americana</i>	270
<i>Ulmus fulva</i>	54
<i>Urtica gracilis</i>	
<i>Verbena angustifolia</i>	
<i>Verbena canadensis</i>	36
<i>Verbena stricta</i>	30
<i>Vernonia fasciculata</i>	274
<i>Viola palata</i>	123
<i>Viola pedatifida</i>	137
<i>Viola eriocarpa</i>	161
<i>Viorna pitcheri</i>	225
<i>Vitis vulpina</i>	115
<i>Xanthium americanum</i>	73
<i>Vitis cordifolia Michx.</i>	264

List No. 3.--Species reported by A.S. Hitchcock but not
collected by the writer during the course
of her trips.

*Acalypha ostryaefolia**

*Acalypha virginica**

*Acnida tamariscina**

Acum. illinoensis

Afzelia macrophylla

Agastache neptoides

Agrimonia mollis

Agrimonia parviflora

Agropyron repens

Allionia albidia

Allium stellatum

Amaranthus blitoides

Amaranthus graecizans

*Amaranthus retroflexus**

Amaranthus spinosus

Amelopsis cordata

*Andropogon scoparius**

Anemone virginiana

Apiastrum patens (*Spermolepsis patens*)

Apocynum cannabinum

Arabis canadensis

Arctium minus
Argemone alba
Arisaema triphyllum
Artemisia dracunculoides
Artemisia graphaloides
Asclepias sullivantii
Asclepias syriaca
Asimina triloba
Aster laevis
Aster multiflorus
Astragalus canadensis
Botrychium virginianum
*Bouteloua oligostachya**
*Bouteloua curtipendulus**
Brassica juncea
Calceolaria verticillata
*Campanula americana**
Capnoides aureum
*Cirsium lanceolatum**
Cirsium altissimum
Carex crus-corvi
Carex laxiflora
Carex Muhlbergii var. *xalapensis*

*Chamaecrista fasciculata**
*Cenchrus pauciflorus**
Cephalanthus occidentalis
Chenopodium bosciannum
Chenopodium hybridum
*Chenopodium leptophyllum**
Chenopodium leptophyllum var. *subglabrum*
Chrysopsis avenaceus (*Sorghastrum nutans*)
Cossuella daucifolia
Comandra umbellata
*Commelina virginica**
*Croton capitatus**
Cuscuta polygonorum
Cycloloma atrilicifolium
Cyperus esculentus
Cyperus speciosus
Delphinium carolinianum
Dianthera americana
Eatonia obtusata (*Sphenopholis obtusata*)
Eleocharis palustris (*Glaucescens*)
*Elymus canadensis**
Eupatorium altissimum
*Eupatorium urticaefolium**

- Euphorbia dentata* (*Poinsettia dentata*)*
Euphorbia heterophylla (*Poinsettia heterophylla*)*
Euphorbia hexagona (*Zygophyllum hexagona*)*
Euphorbia maculata (*Chamaesyce maculata*)*
Euphorbia serpens (*Chamaesyce serpens*)
Euphorbia nuttallii (*Chamaesyce zygophylloides*)*
Euphorbia strictospora
Euthamia graminifolia (*Solidago graminifolia*)
Evolvulus pilosus
Eragrostis capillaris
*Eragrostis cilianensis**
*Eragrostis pectinacea**
Falcata pitcheri
Festuca nutans
Galium concinnum
Galium triflorum
Gaura parviflora
Gentiana puberula (*Dasystephana puberula*)
Gerardia densiflora (*Otophylla densiflora*)
Geum canadense
*Grindelia squarrosa**
Hartmannia speciosa
*Helianthus annuus**
Helianthus grosse-serratus

*Helianthus maximiliani**
Helianthus orgyalis
Helianthus scaberrimus
Heliopsis scabra
Hibiscus militaris
*Hicoria cordiformis**
*Hordeum pusillum**
Houstonia angustifolia
Hydrophyllum virginianum
Hypericum cistifolium
Impatiens pallida
Ipomoea pandurata
*Ipomoea purpurea**
*Chaetochloa lutescens**
*Chaetochloa viridis**
Juncus torreyi
*Kuhnia eupatorioides**
*Lacinaria punctata (Liatris punctata)**
Lappula virginiana
Lepidium densiflorum
*Leptilon canadense**
Lespedeza violacea
*Lippia cuneifolia**
Lippia lanceolata

Lycium vulgare (*Lycium halimifolium*)

Lythrum alatum

*Malva rotundifolia**

Meibomia grandiflora

Meibomia canescens

Mentha canadensis

Mentzelia oligosperma

Mesadenia atriplicifolia

Mimulus ringens

Mollugo verticillata

Monolepis nuttalliana

Oenothera biennis

Onosmodium molle

*Ostrya virginiana**

Panicularia nervata

*Panicum capillare**

Parietaria pennsylvanica

Parosola dalea

Paspalum ciliatifolium

Penthorum sedoides

Petalostemon multiflora

Cogswellia daucifolia

Phryma leptostachya

Physalis heterophylla

Physalis longifolia

Physalis pumila

Pilea pumila

Plantago aristata

Plantago rugelii

Polygala verticillata

*Polygonum muhlenbergii**

Polygonum littorale

Polygonum ramosissimum

Polygonum scandens

*Polygonum persicaria**

Polygonum punctatum

Populus deltoides

Portulaca oleracea

Quercus prinoides

Ratibida pinnata

Radicula palustris

Radicula sessiliflora

Rubus canadensis

Rubus occidentalis

Rubus Baileyanus

Rudbeckia hirta

*Ruellia strepens**
*Rumex acetosella**
Sagittaria ambigua
Salix amygdaloides
Salix cordata
*Salvia pitcheria**
Schedonardus peniculatus
Scirpus validus
Scrophularia marylandica
Sida spinosa
Tridens flava
Sisymbrium officinalis (Erysimum officinalis)
Sisymbrium angustifolium
Solanum elaeagnifolium
*Solanum nigrum**
Sonchus asper
Sophia incisa
Spartina michauxiana
*Sporobolus cryptandrus**
*Stipa spartea**
Strophostyles pauciflora
*Syntherisma sanguinale**
Teucrium occidentale

Thalesia uniflora
Thalictrum revolutum
Tilia glabra
Tradescantia virginiana
Tragia ramosa
Uriola latifolia
Verbosina alternifolia
Verbena bracteosa
Verbena hastata
*Verbena urticaefolia**
Vernonia baldwinii
Viola papilionacea
Vitis cinerea

*denotes plant species that are without a doubt present in the county flora, but were not collected during the present study, for the reason that they were not in season for identification.

A continued study of the county, especially during the autumn and in other parts of the county, would without doubt cut down List No. 3. Some of these are plants of very special habitats.

SUMMARY

1. Wataunsee County is an area of 804 square miles situated in the eastern third of the state of Kansas, bounded on the north by the Kansas River. The altitude varies from about 1000 to 1900 feet. The streams are well distributed thruout the county. Limestone outcrops are common, while glacial drift is evident in the northern part of the county.

2. As a result of continuous dry winters and moist summers grass thoroly dominates the vegetation.

3. The earliest permanent settlers came about 1853-54.

4. Portions of the county were swept by prairie fires in the years 1869-71; 1873, 1889 and 1891, for which the early settlers were responsible. They also introduced the saw mill and many new plant species which were cultivated for food. After the railroad was built many cattle were shipped in and grazed on the open prairie.

5. Areas which have been protected by fires, tramping by stock, and cultivation, for example high bluffs and valloys along streams with sufficient moisture to support quite a dense tree growth, otherwise the area is open prairie. One area of local interest supports the growth of native junipers.

6. Nineteen species of important stock poisoning plants are found in Wabaunsee County.

7. A tabulated list shows a total of 477 species of which composites were most numerous, grasses and legumes second, and mustards third.

8. In 1899, A. S. Hitchcock listed about 356 species from the county. In 1926-27, the author collected and observed 292 which included 115 not previously listed which leaves 195 species not found in the limited time. However, 52 of these are without question in the county.

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I wish to express my thanks to others who have aided in

the preparation of this manuscript.

EXPLANATION OF MAPS

In the instances where the map is plotted with  it refers to the fact that the specimen has actually been collected by the writer in the general location indicated. The symbol  merely means the species has been observed by the writer but not collected and its position on the map has no reference to general location. The symbol  indicates that A. S. Hitchcock has reported the species in the county previous to 1899 and its position on the map has no specific significance.



Reported by A. S.
Hitchcock.



Specimen collected by
author.

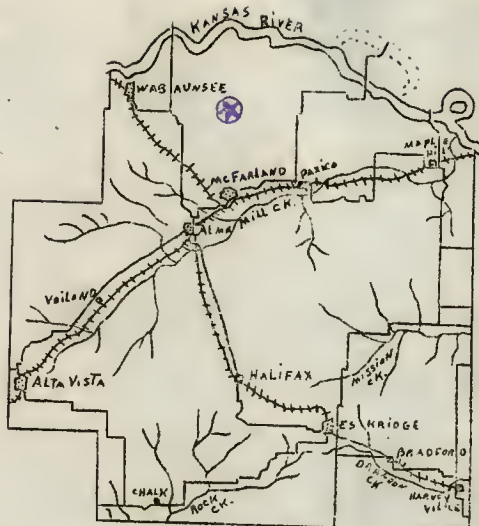


WABAUNSEE COUNTY

Species observed by author.



WABAUNSEE COUNTY



OPHIOGLOSSACEAE

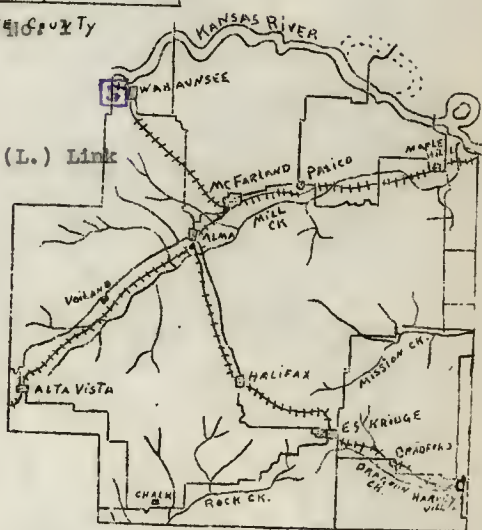
Botrychium virginianum

L. SW.

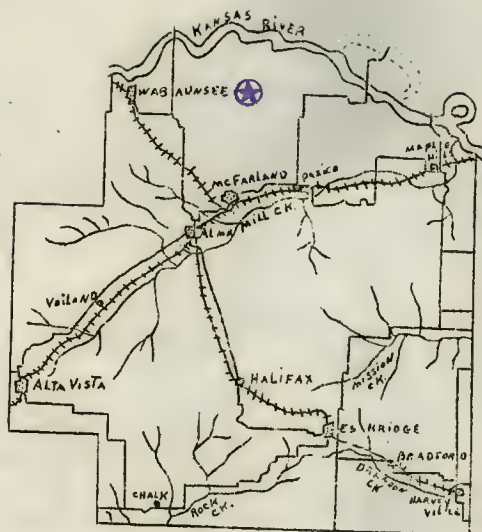
WABUNSEE COUNTY
Map No. 1

POLYPODIACEAE

Pellaea atropurpurea (L.) Link



WABUNSEE COUNTY
Map No. 2

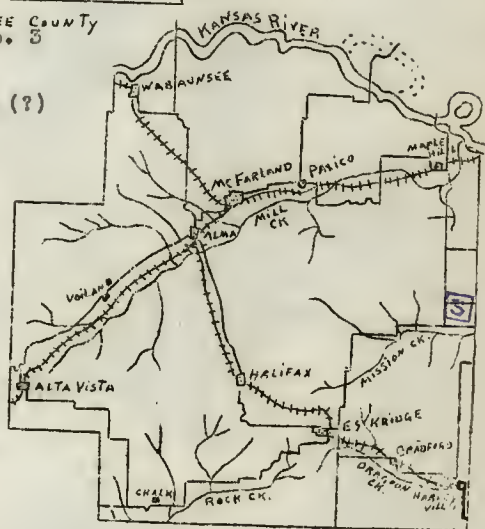


EQUISETACEAE

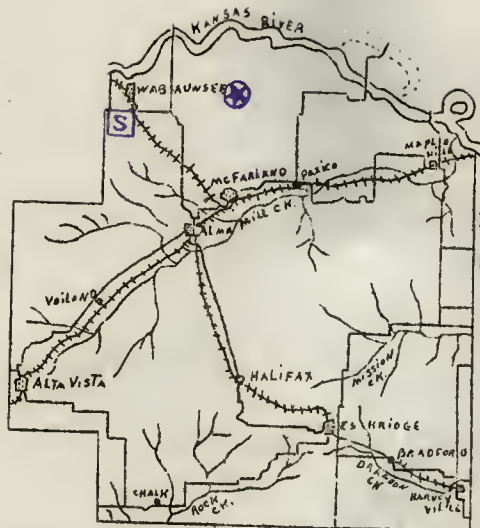
Equisetum arvense L.

WABAUNSEE COUNTY
Map No. 3

Equisetum hyemale L. (?)



WABAUNSEE COUNTY
Map No. 4



PINACEAE

Juniperus virginiana L.

WABAUNSEE COUNTY

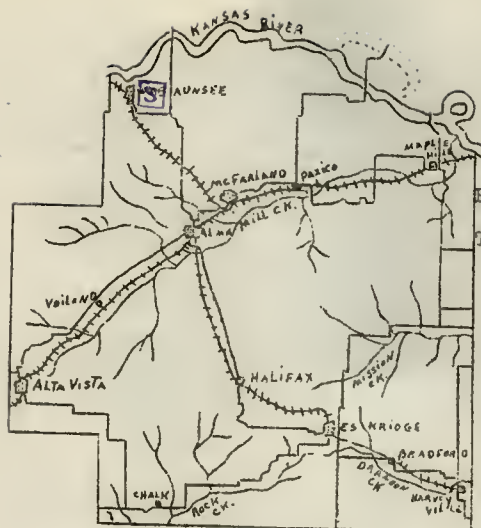
Map No. 5

Juniperus communis L. (?)



WABAUNSEE COUNTY

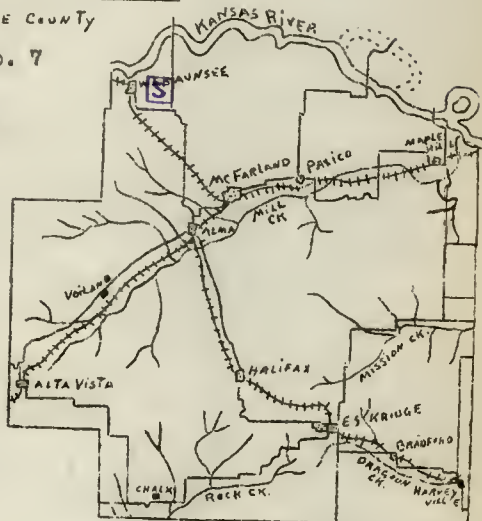
Map No. 6



WABAUNSEE COUNTY

Map No. 7

Pinus sylvestris Ait.



WABAUNSEE COUNTY

Map No. 8



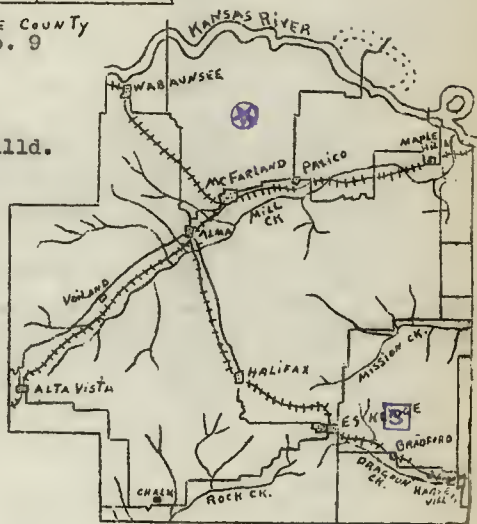
ALISMATACEAE

Sagittaria ambigua J.

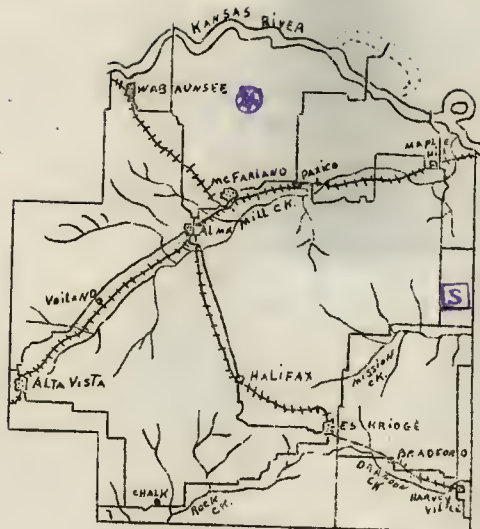
G. Sm.

WABAUNSEE COUNTY
Map No. 9

Sagittaria latifolia Willd.



WABAUNSEE COUNTY
Map No. 10



TYPHACEAE

Typha latifolia L.

WABAUNSEE COUNTY

Map No. 11



WABAUNSEE COUNTY



LILIACEAE

Asparagus officinalis L.

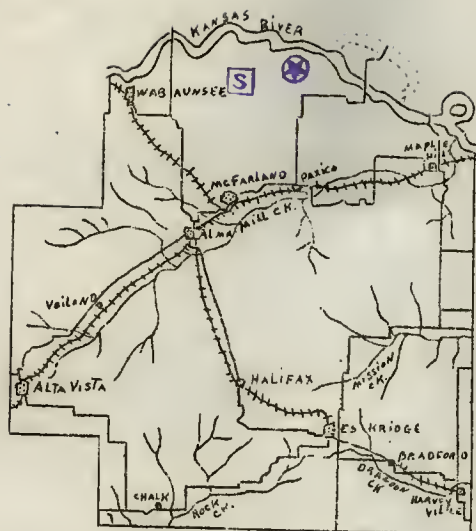
WABAUNSEE COUNTY
Map No. 12

Polygonatum commutatum (R & S)

Dietr.



WABAUNSEE COUNTY
Map No. 13



WABAUNSEE COUNTY
Map No. 14

Erythronium albidum Nutt.



WABAUNSEE COUNTY
Map No. 15

LILIACEAE

Erythronium mesachoreum

Kneer

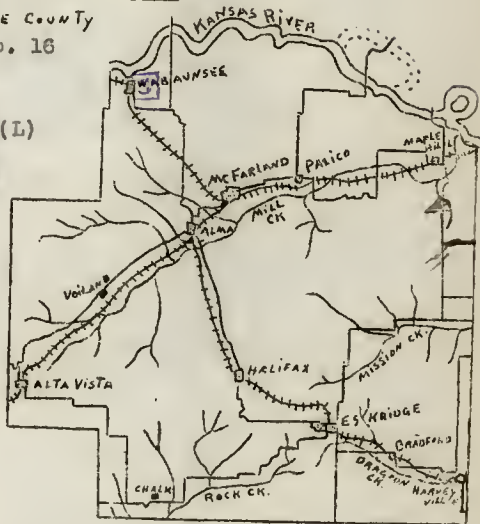


LILLIACEAE

Smilax hispida Muhl.

WABAUNSEE COUNTY
Map No. 16

Nothoscordum bivalve (L)
Britton



WABAUNSEE COUNTY
Map No. 17



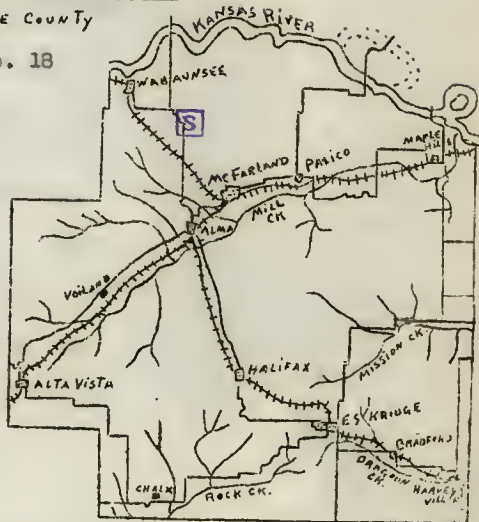
LILIACEAE

Smilax herbacea L.

WABAUNSEE COUNTY

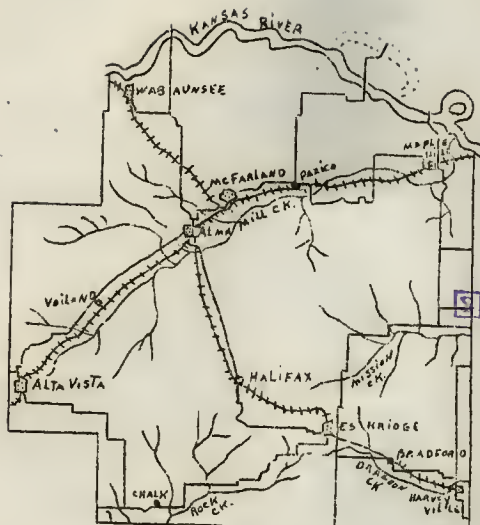
Map No. 18

Allium canadense L.



WABAUNSEE COUNTY

Map No. 19



LILIACEAE

TorisCORDION nuttallii

(A. Gray) Rydb.

WABAUNSEE COUNTY
Map No. 20

Allium stellatum Ker.



WABAUNSEE COUNTY
Map No. 21



COMMELINACEAE

Commelina virginica L.

WABAUNSEE COUNTY

Map No. 22

Tradescantia bracteata Small



WABAUNSEE COUNTY

Map No. 23



WABAUNSEE COUNTY
Map No. 24

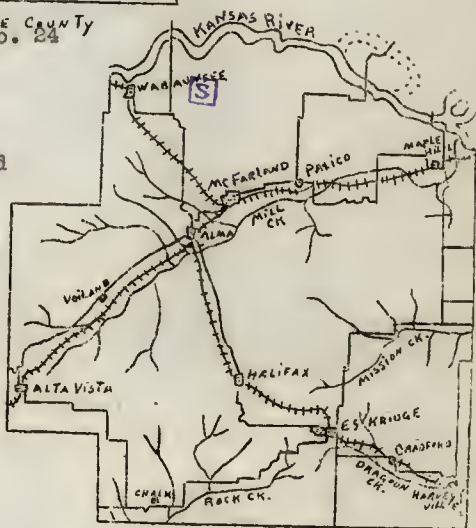
COMMELINACEAE

Tradescantia virginiana

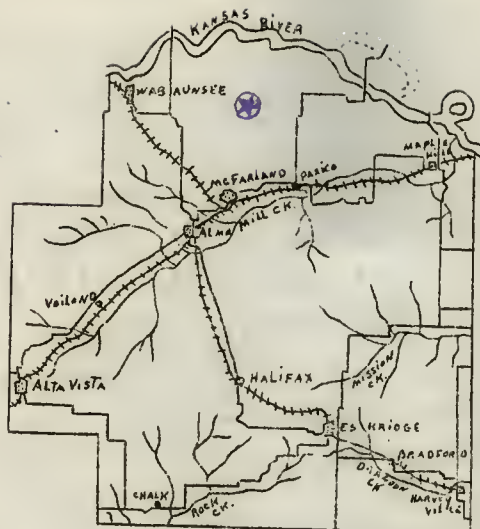
L.

JUNCACEAE

Juncus dudleyi Weigund



WABAUNSEE COUNTY
Map No. 25



JUNCACEAE

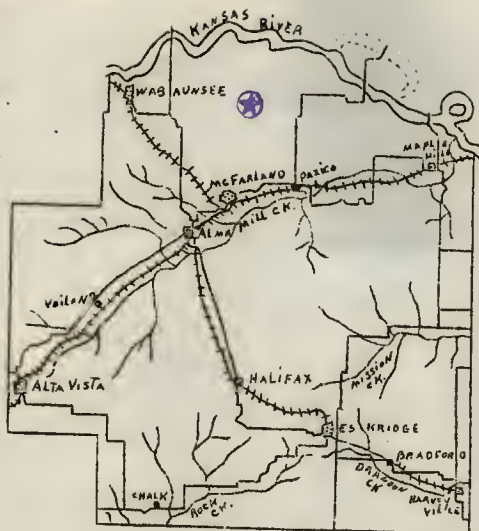
Juncus tenuis Willd.

WABUNSEE COUNTY
Map No. 267

Juncus torreyi Coville



WABUNSEE COUNTY
Map No. 271



ARACEAE

Arisaema triphyllum

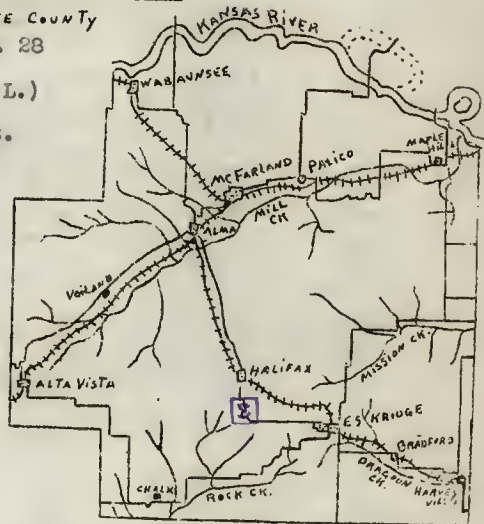
(L.) Schott.

WABAUNSEE COUNTY

Map No. 28

Arisaema dracontium (L.)

Schott.



WABAUNSEE COUNTY

Map. No. 29



CYPERACEAE

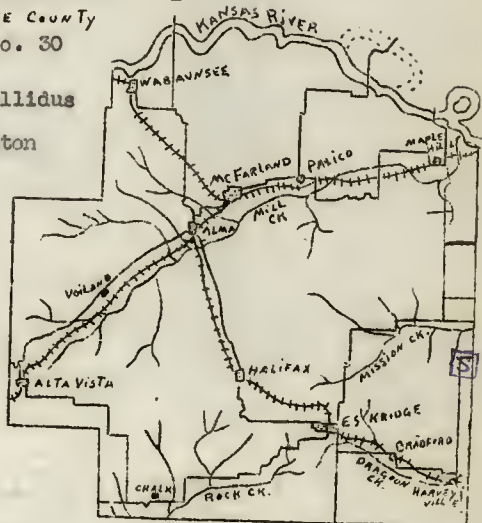
Carex pennsylvanica Lam.

WABAUNSEE COUNTY

Map No. 30

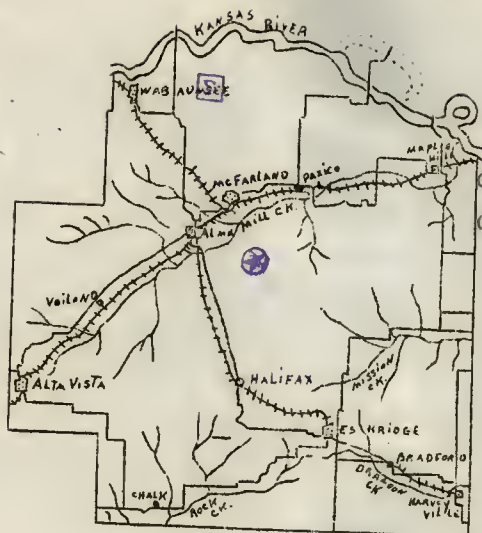
Scirpus atrovirens pallidus

Britton



WABAUNSEE COUNTY

Map No. 31



CYPERACEAE

Carex hystrixina Muhl.

WABAUNSEE COUNTY
Map No. 32

Carex laxiflora Lam.



WABAUNSEE COUNTY
Map No. 33



CYPERACEAE

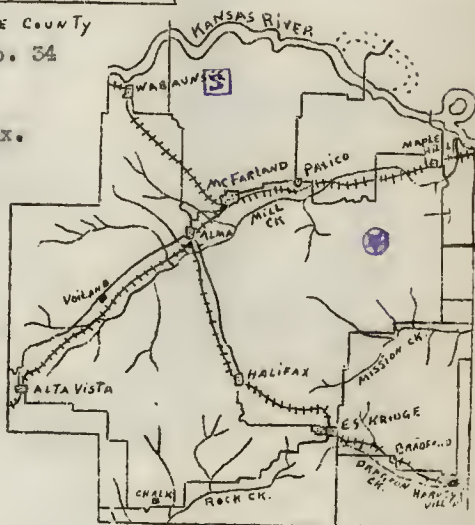
Carex mühlenbergii

Schm.

WABAUNSEE County

Map No. 34

Carex vulpinoidea Michx.



WABAUNSEE County

Map No. 35



WABAUNSEE COUNTY
Map No. 36

CYPERACEAE

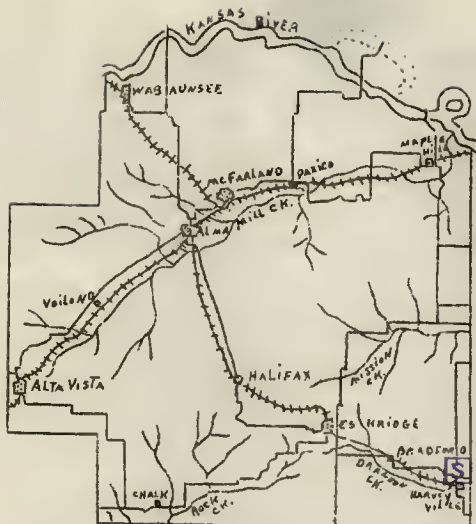
Carex crus-corvi

Shuttlew.

Carex festucacea Schkuhr.



WABAUNSEE COUNTY
Map No. 37



CYPERACEAE

Carex stricta Lam.

WABAUNSEE COUNTY

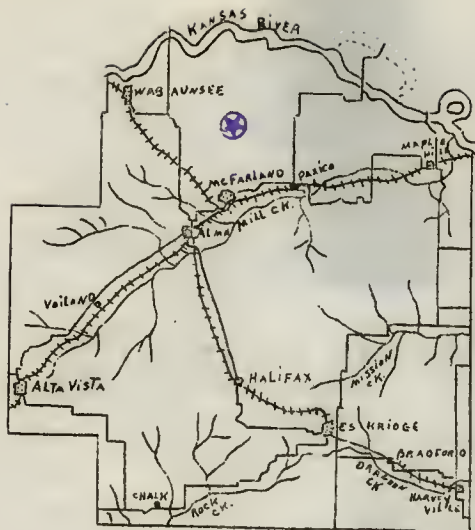
Map No. 38

Cyperus speciosus Vahl.



WABAUNSEE COUNTY

Map No. 39



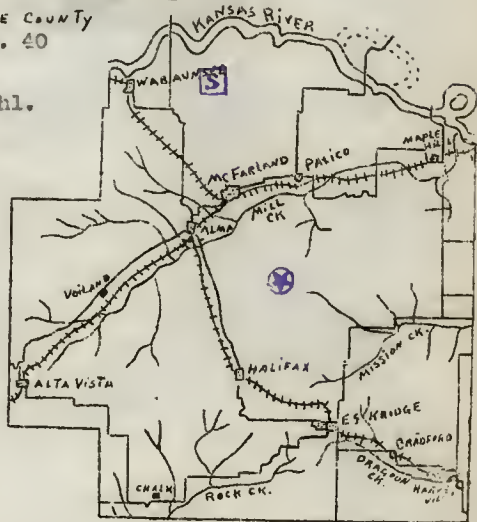
CYPERACEAE

Cyperus esculentus L.

WABAUNSEE COUNTY

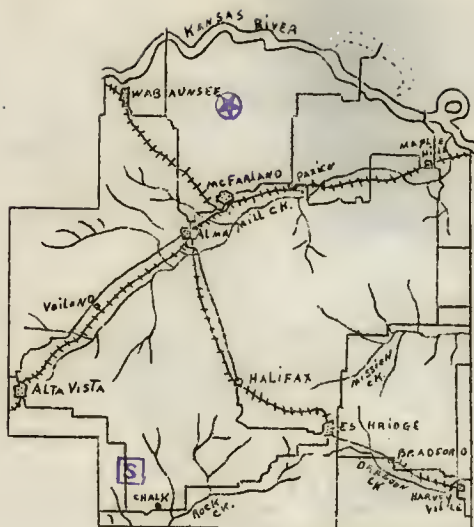
Map No. 40

Cyperus filiculmis Vahl.



WABAUNSEE COUNTY

Map No. 41



CYPERACEAE

Scirpus lineatus Michx.

WABAUNSEE COUNTY

Map No. 42

Scirpus validus Vahl.



WABAUNSEE COUNTY

Map No. 43



CYPERAGRAE

Eleocharis tenuis (Willd.)

Schultes

WABAUNSEE COUNTY

Map No. 44



WABAUNSEE COUNTY



CYPERACEAE

Eleocharis palustris

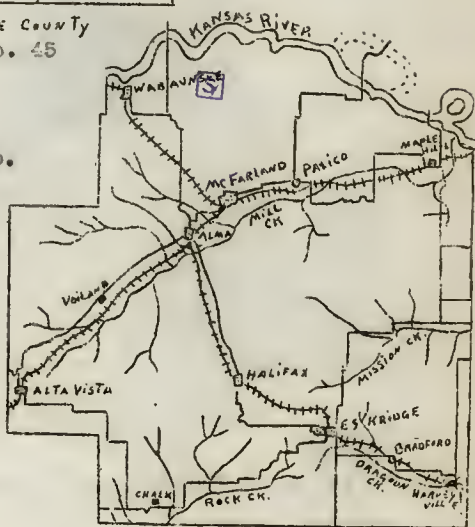
(Willd.) Gray

(glaucescens)

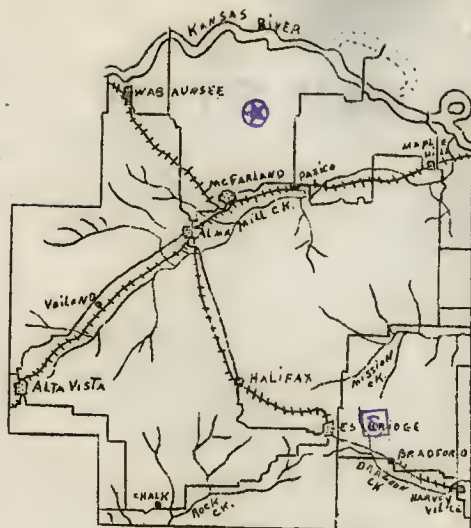
WABAUNSEE COUNTY
Map No. 45

GRAMINEAE

Agropyron Smithii Rydb.



WABAUNSEE COUNTY
Map No. 46



GRANITEAE

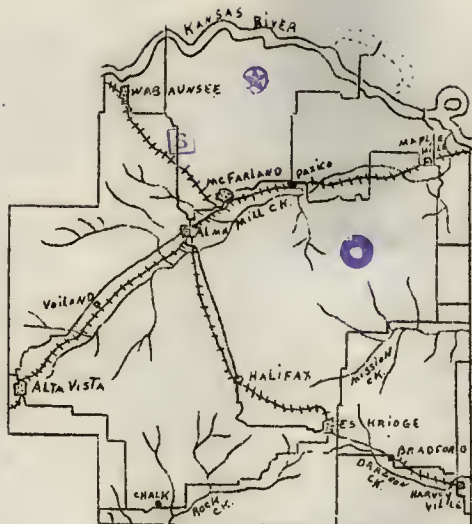
Hordeum jubatum L.

WABAUNSEE COUNTY
Map No. 47

Hordeum pusillum Nutt.



WABAUNSEE COUNTY
Map No. 48



GRAMINEAE

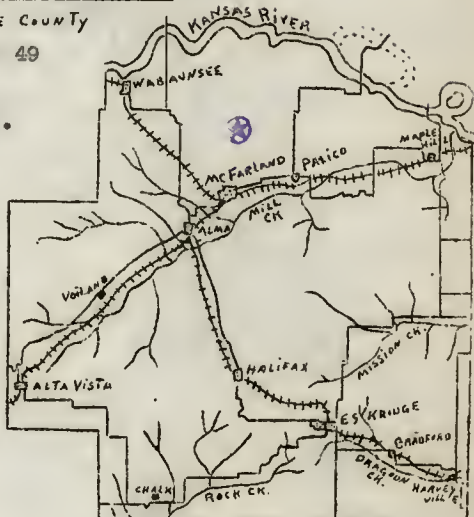
Tripsacum dactyloides

L.

WABAUNSEE COUNTY

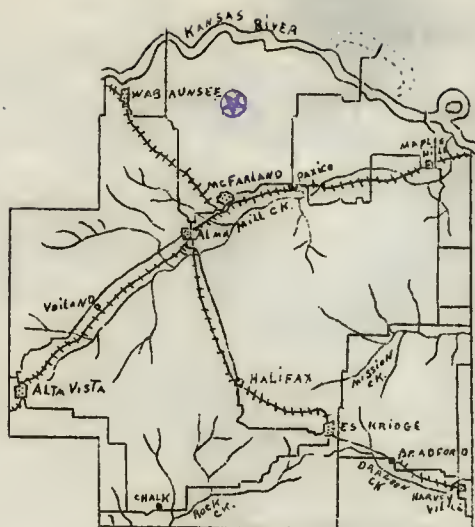
Map No. 49

Uniola latifolia Michx.



WABAUNSEE COUNTY

Map No. 50



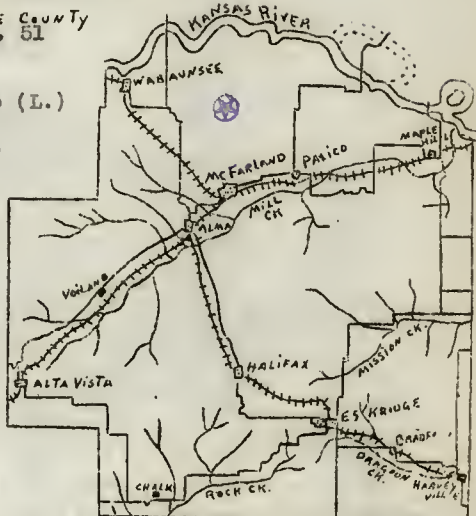
GRAMINOBÆ

Stipa spartea Trin.

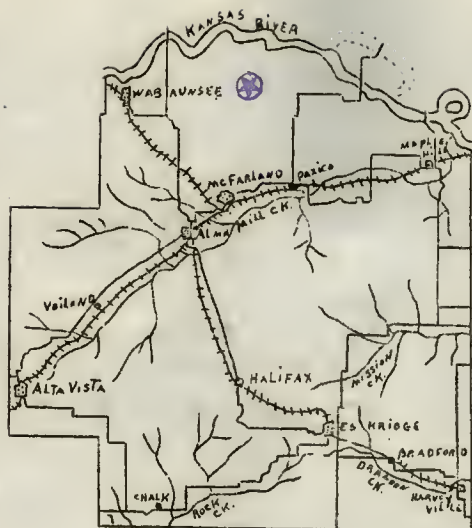
WABAUNSEE COUNTY
Map No. 51

Syntherisma sanguinale (L.)

Dalac.



WABAUNSEE COUNTY
Map No. 52



GRAMINEAE

Sporobolus cryptanchrus

(Torr.) Gray

WABAUNSEE COUNTY

Map No. 53

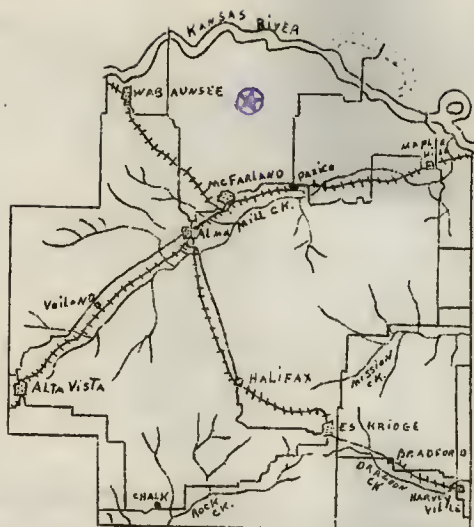
Muhlenbergia cuspidatus

(Torr.) Nash



WABAUNSEE COUNTY

Map No. 54



GRAMINAE

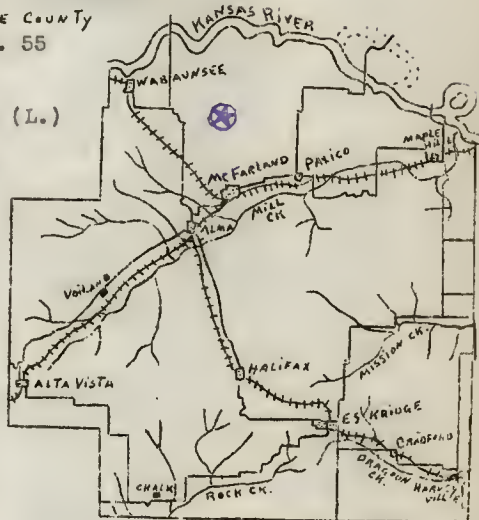
Trifolium flavum (L.)

Hitchc.

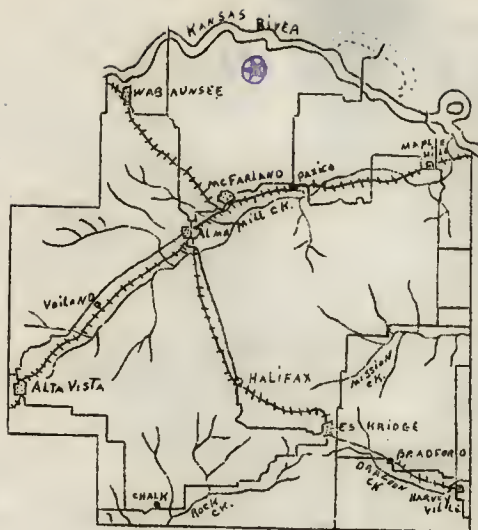
WABAUNSEE COUNTY
Map No. 55

Spartina cynosuroides (L.)

Roth.



WABAUNSEE COUNTY
Map No. 56



GRAMINEAE

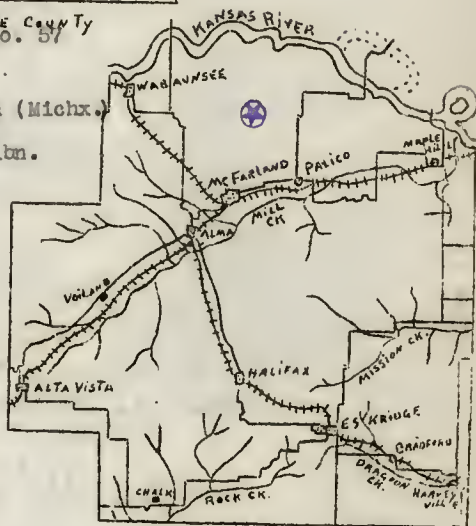
Sorghastrum nutans

(L.) Nash

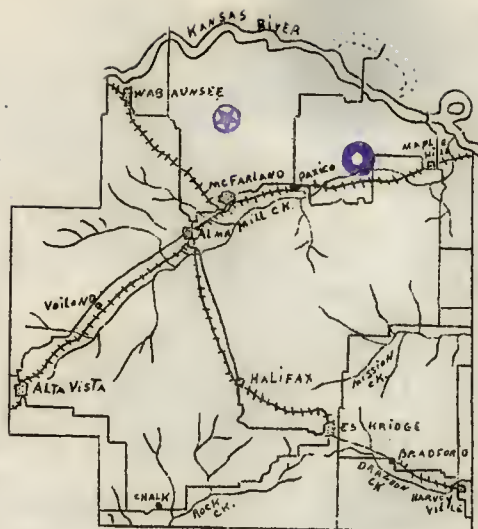
WABAUNSEE COUNTY
Map No. 57

Sphenopholis obtusata (Michx.)

Scribn.



WABAUNSEE COUNTY
Map No. 58



WABAUNSEE COUNTY

Map No. 59

Schedonardus paniculatus

(Nutt.) Trel.

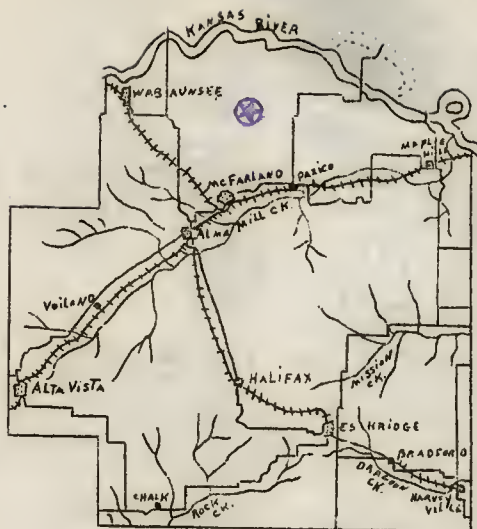
GRAMINEAE

Poa compressa L.



WABAUNSEE COUNTY

Map No. 60



WABAUNSEE COUNTY

Map No. 61

Gnecurus tribuloides L.



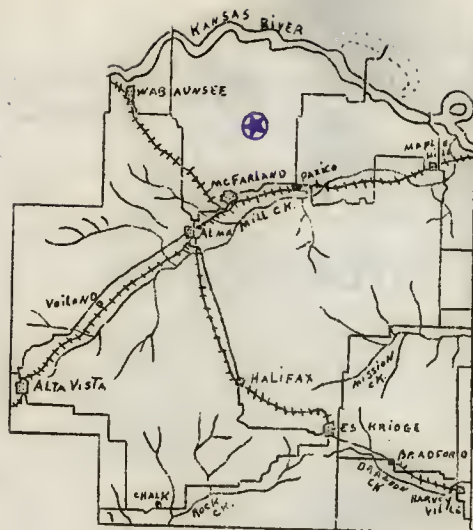
WABAUNSEE COUNTY

GRAMINEAE

Atheropogon curtipendulus (Michx.)

Fourn.

Map No. 62



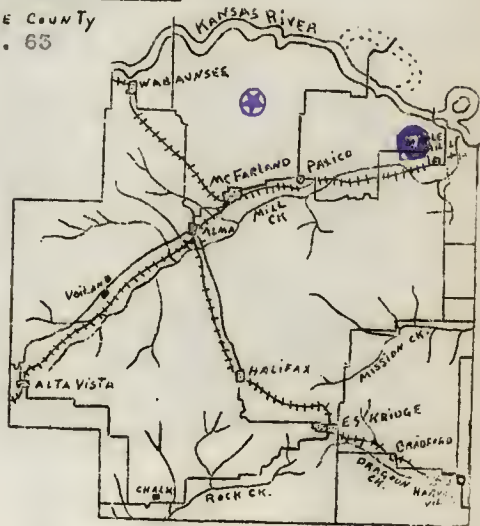
GRAMINEAE

Paspalum ciliatifolium

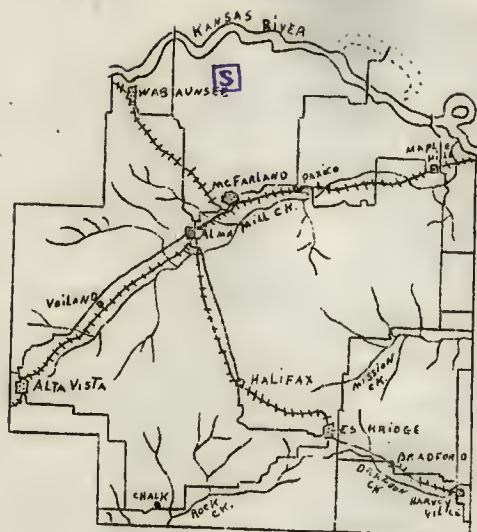
Michx.

WABAUNSEE COUNTY
Map No. 63

Phleum pratense L.



WABAUNSEE COUNTY
Map No. 64



GRAMINEAE

Agrostis hyemalis (Walt)

B.S.P.

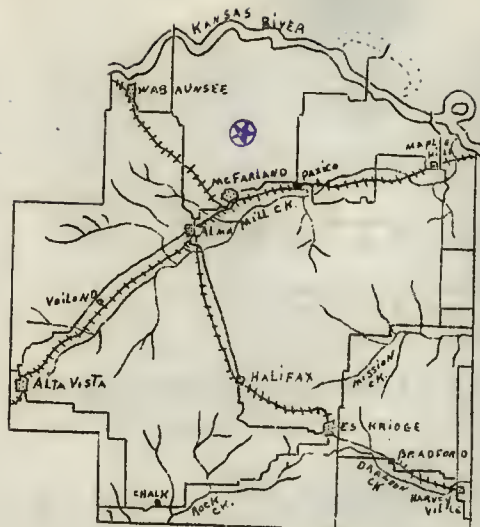
WABAUNSEE COUNTY
Map No. 65

Schizachyrium scoparium

(Michx.) Nash



WABAUNSEE COUNTY
Map No. 66



WABAUNSEE COUNTY
Map No. 67

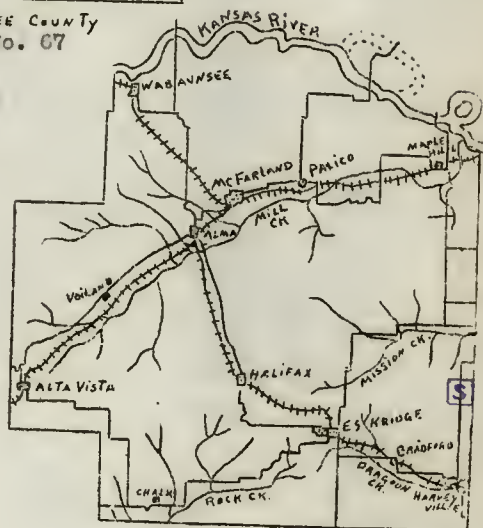
GRAMINEAE

Agropyron repens (L.)

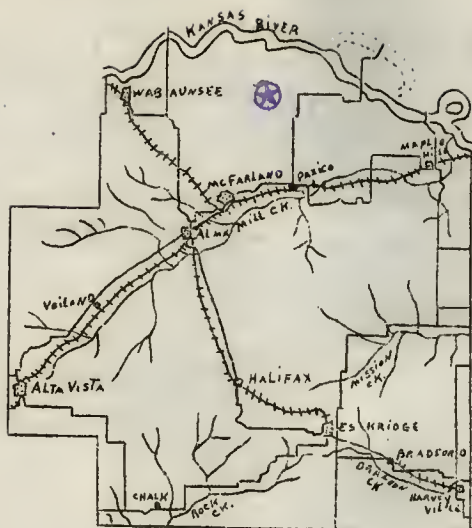
Beauv. (glaucum)

Hitchc.

Bromus japonicus D.C.



WABAUNSEE COUNTY
Map No. 68



GRAMINIFAE

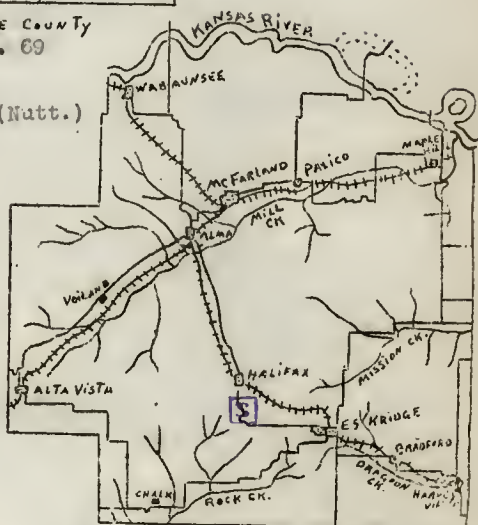
Bouteloua oligostachy

(Nutt.) Torr.

WABAUNSEE COUNTY
Map No. 69

Bulbilis dactyloides (Nutt.)

raf.



WABAUNSEE COUNTY
Map No. 70

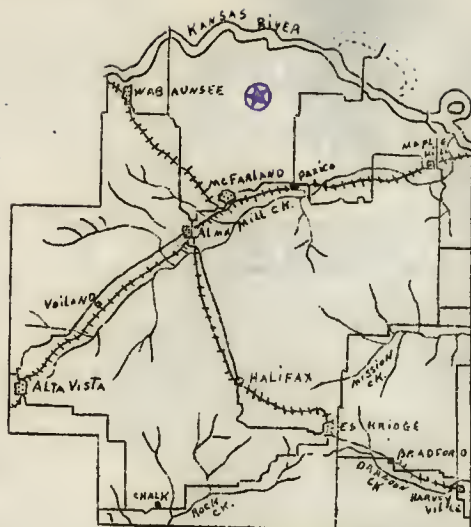


WABAUNSEE COUNTY
Map No. 71

Bragrostis pectinacea
(Michx.) Steud.



WABAUNSEE COUNTY
Map No. 72



GRAMINEAE

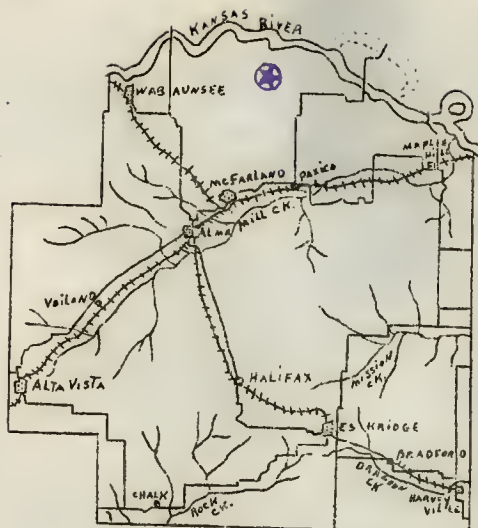
Festuca nuda Nutt.

WABUNSEE COUNTY
Map No. 73

Festuca nuda Spreng.



WABUNSEE COUNTY
Map No. 74



WABAUNSEE COUNTY

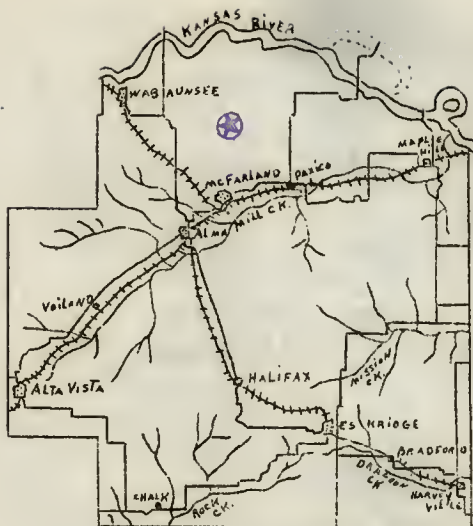
Map No. 75

Elymus virginicus L.



WABAUNSEE COUNTY

Map No. 76



GRAMINEAE

Chaetochloa glauca L.

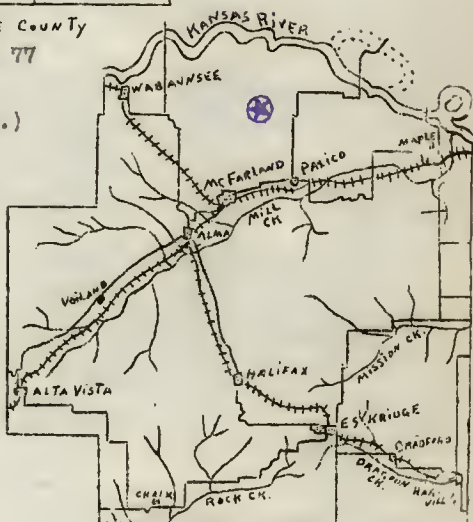
Scribn.

WABAUNSEE COUNTY

Map No. 77

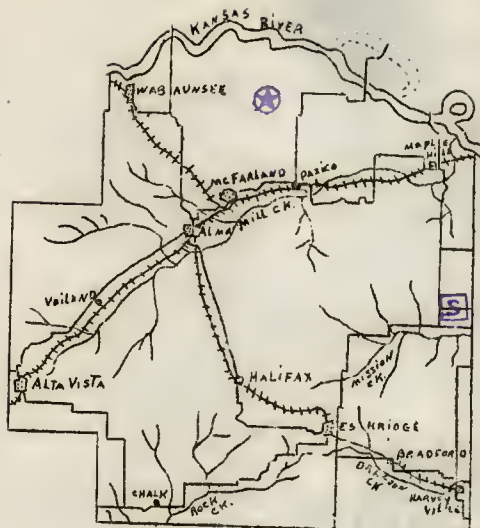
Chaetochloa viridis (L.)

Scribn.



WABAUNSEE COUNTY

Map No. 78



GRAMINEAE

Echinochloa crus-galli

(L.) Beauv.

WABAUNSEE COUNTY

Map No. 79

Panicum nervata Willd.

Kuntze



WABAUNSEE COUNTY

Map No. 80



GRAMINEAE

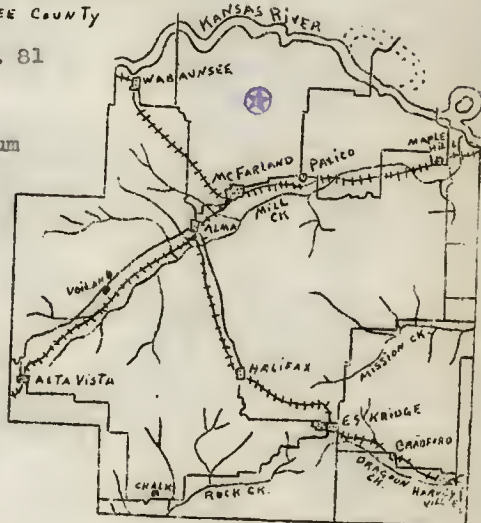
Panicum capillare L.

WABAUNSEE COUNTY

Map No. 81

Panicum dichotomiflorum

Michx.



WABAUNSEE COUNTY

Map No. 82



GRAMINEAE

Panicum scribnerianum

Nash.

WABAUNSEE COUNTY

Map No. 83

Koeleria cristata Pers.



WABAUNSEE COUNTY

Map No. 84



WABAUNSEE COUNTY
Map No. 85

IFIDACEAE

Sistrinchium campestre

Bicknell

Sistrinchium angustifolium

Mill.



WABAUNSEE COUNTY
Map No. 86



MAGNOLIACEAE

Asimina triloba Dunal.

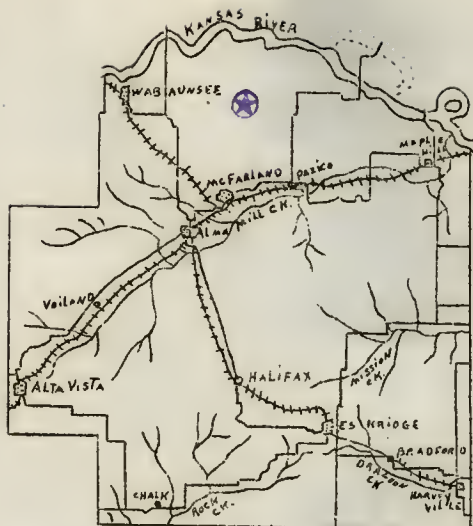
WABAUNSEE COUNTY
Map No. 87

SAURURACEAE

Juglans nigra L.



WABAUNSEE COUNTY
Map No. 88

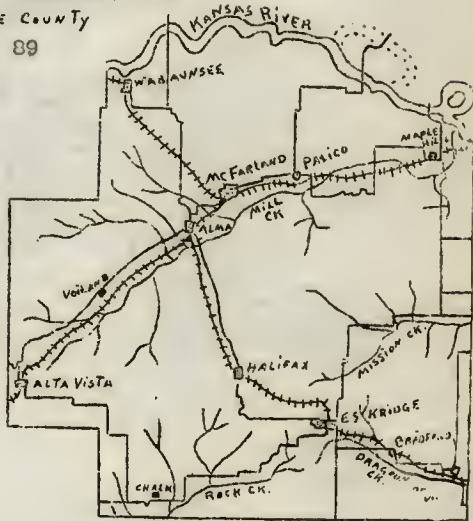


RANUNCULACEAE

Thalictrum revolutum DC.

WABAUNSEE COUNTY

Map No. 89



WABAUNSEE COUNTY



RANUNCULACEAE

Thalictrum dioicum L.

WABAUNSEE COUNTY
Map No. 90

Viorna pitcheri (T & G)

Britton



WABAUNSEE COUNTY
Map No. 91

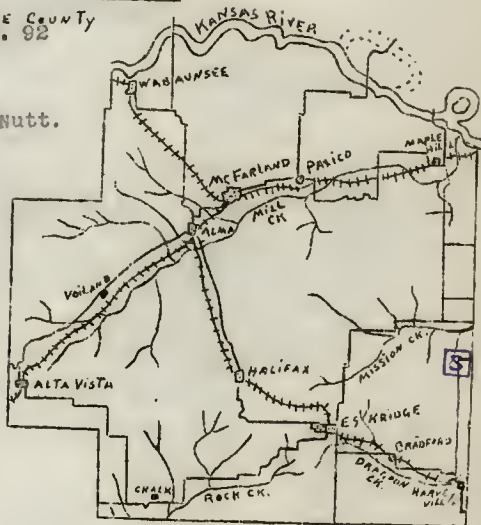


RANUNCULACEAE

Ranunculus abortivus L.

WABAUNSEE COUNTY
Map No. 92

Delphinium virescens Nutt.



WABAUNSEE COUNTY
Map No. 93



WABAUNSEE COUNTY
Map No. 94

RANUNCULACEAE

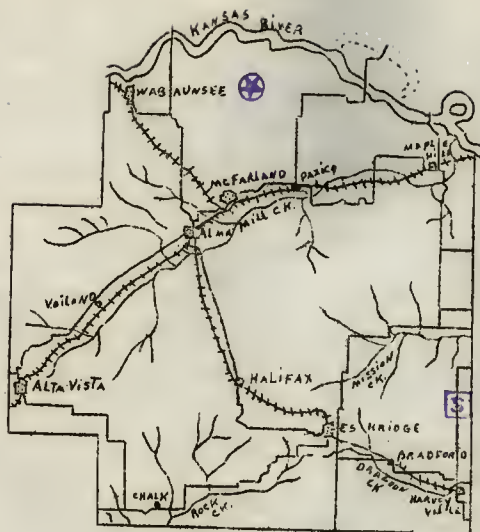
Delphinium carolinianum

Walt.

Delphinium tricornis Michx.



WABAUNSEE COUNTY
Map No. 95



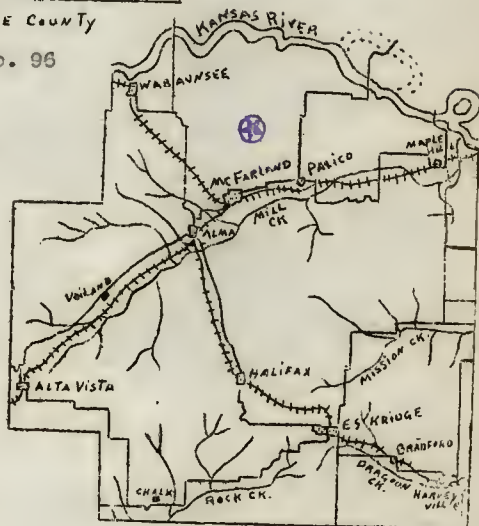
RANUNCULACRAE

Anemone decapetala Ard.

WABAUNSEE COUNTY

Map No. 96

Anemone virginiana L.



WABAUNSEE COUNTY

Map No. 97



BERBERIDACEAE

Monispermum canadense L.

WABAUNSEE COUNTY
Map No. 98

Podophyllum peltatum L



WABAUNSEE COUNTY

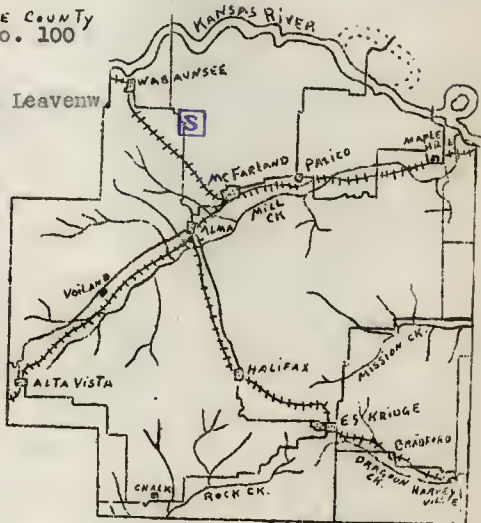


MALVACEAE

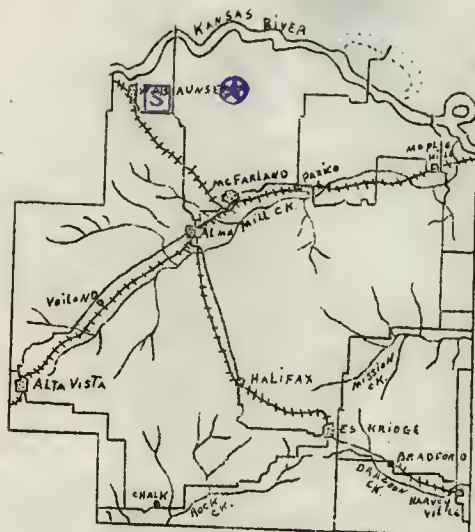
Callirhoe digitata Nutt.

WABAUNSEE COUNTY
Map No. 100

Callirhoe triangulata Leavenw



WABAUNSEE COUNTY
Map No. 101



WABAUNSEE COUNTY

Map No. 102

Callirhoe involucrata (T & G)

Gray



WABAUNSEE COUNTY

Map No. 103

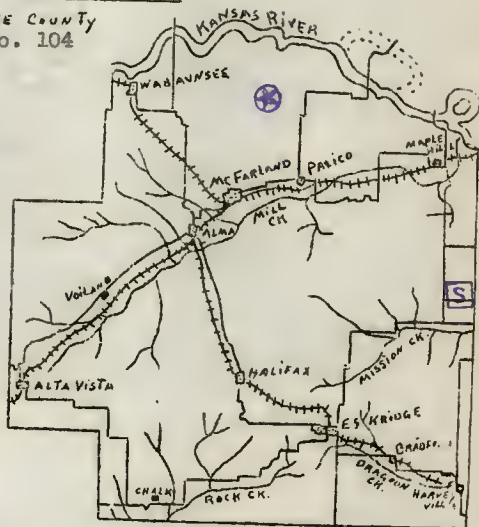


WABAUUNSEE COUNTY
Map No. 104

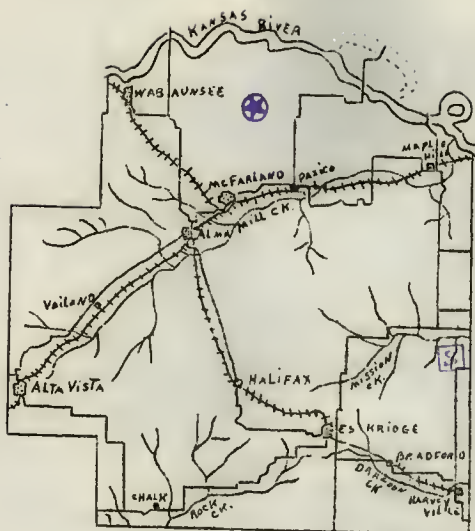
MALVACEAE

Hibiscus militaris Cav.

Hibiscus trionum L.

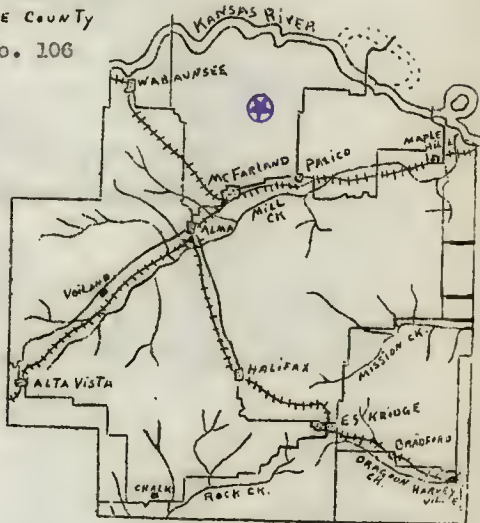


WABAUUNSEE COUNTY
Map No. 105



WABAUNSEE COUNTY
Map No. 106

Malva rotundifolia L.

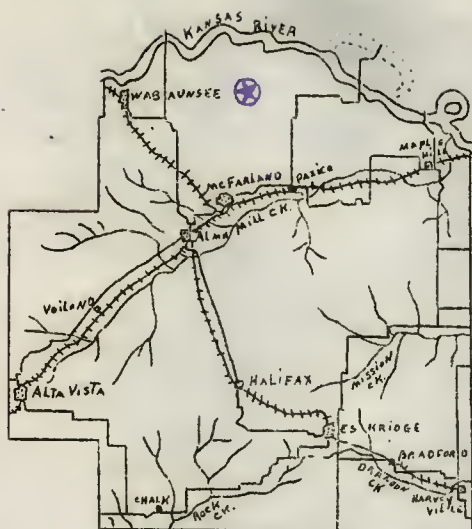


WABAUNSEE COUNTY
Map No. 107

MALVACEAE

Abutilon abutilon (L.)

Rusby



MALVACEAE

Sida spinosa L.

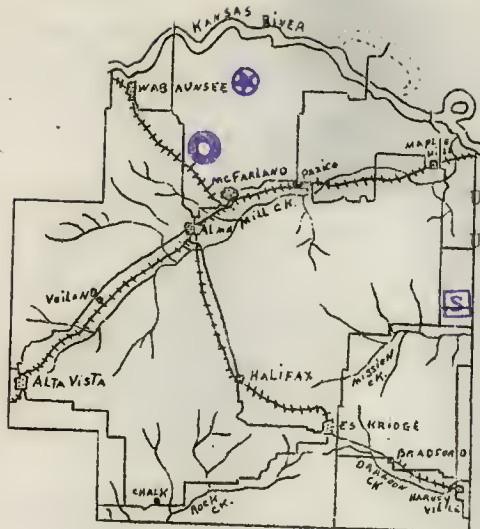
WABAUNSEE COUNTY
Map No. 108

TILIACEAE

Tilia americana L.



WABAUNSEE COUNTY
Map No. 109



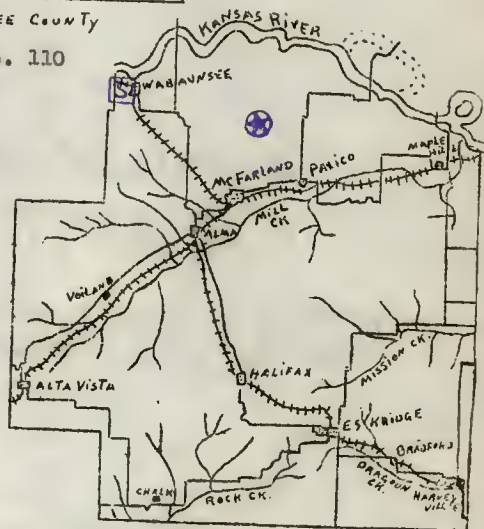
ULMACEAE

Ulmus americana L.

WABAUNSEE COUNTY

Map No. 110

Ulmus fulva Michx.



WABAUNSEE COUNTY

Map No. 111



MORACEAE

Morus rubra L.

WABAUNSEE COUNTY

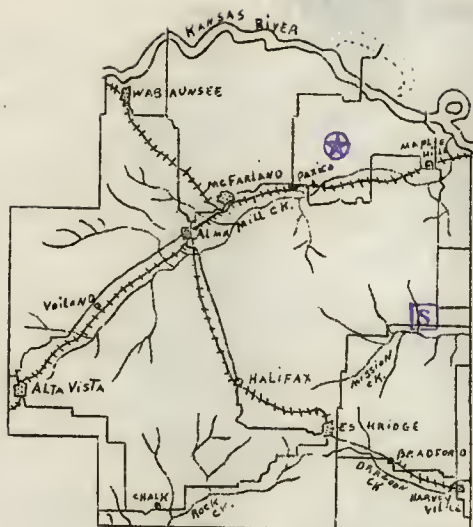
Map No. 112

Morus alba L.



WABAUNSEE COUNTY

Map No. 113



MORACEAE

Cannabis sativa L.

WABAUNSEE COUNTY

Map No. 114

Humulus lupulus L.



WABAUNSEE COUNTY

Map No. 115



MORACEAE

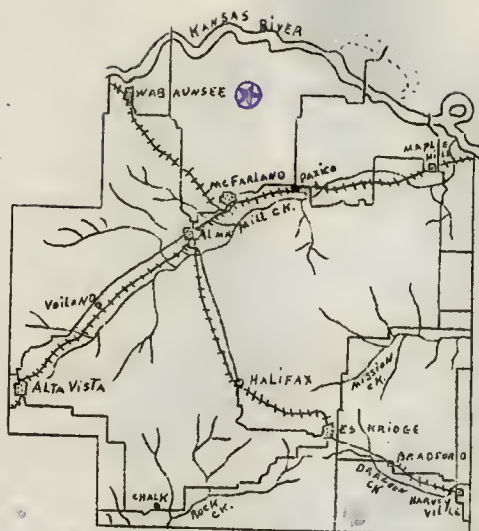
Toxylon pomiferum Raf.

WABAUNSEE COUNTY

Map No. 116



WABAUNSEE COUNTY



URTICACEAE

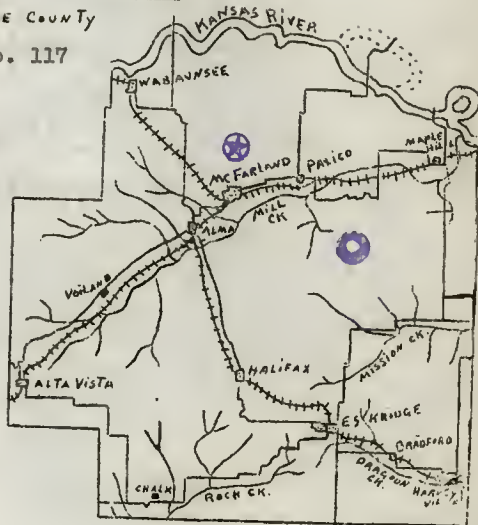
Parietaria pennsylvanica

Muhl.

WABAUNSEE COUNTY

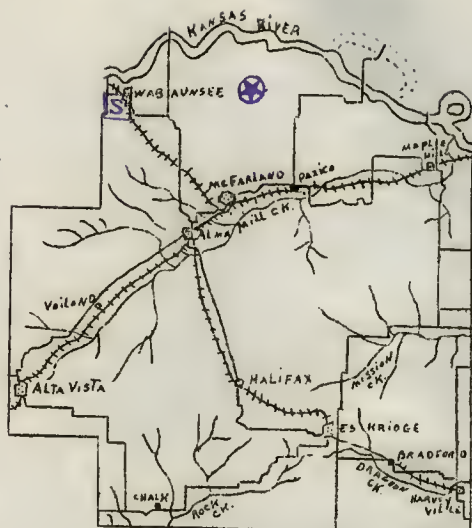
Map No. 117

Urtica gracilis Ait.



WABAUNSEE COUNTY

Map No. 118



URTICACEAE

Celtis occidentalis L.

WABAUNSEE COUNTY
Map No. 119

Pilea pumila (L.) Gray



WABAUNSEE COUNTY
Map No. 120



GERANIACEAE

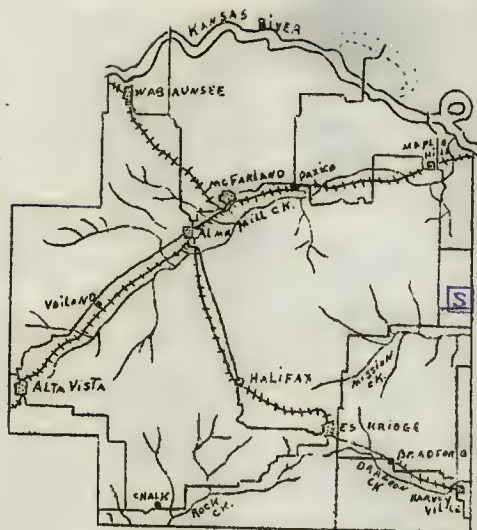
Geranium carolinianum L.

WABAUNSEE COUNTY

Map No. 121



WABAUNSEE COUNTY



OXALIDACEAE

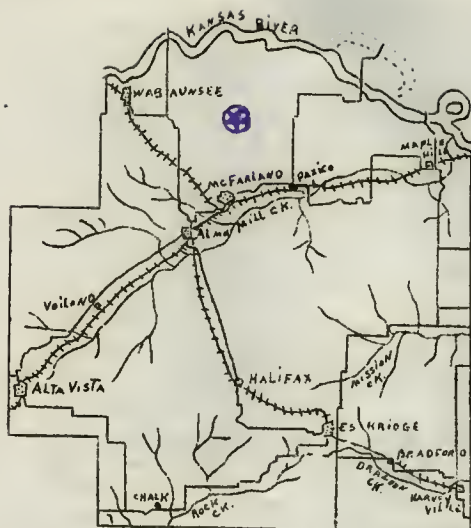
Xanthoxalis cymosa Small.

WABAUNSEE COUNTY
Map No. 122

Oxalis violacea (L.) Small



WABAUNSEE COUNTY
Map No. 123



WABAUNSEE COUNTY
Map No. 124

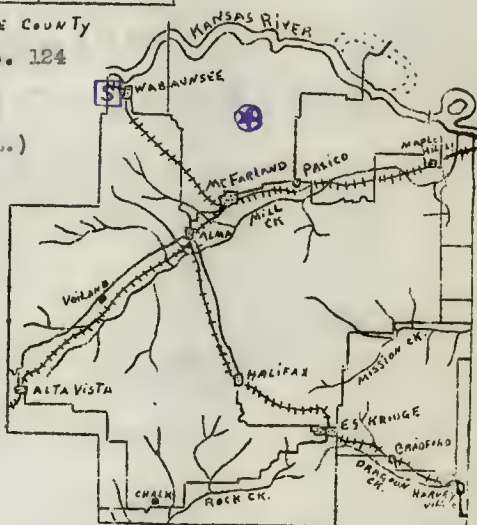
OXALIDACEAE

Xanthoxylis corniculata

(L.) Small

Xanthoxylis stricta (L.)

Small



WABAUNSEE COUNTY
Map No. 125



LINACEAE

Cathartollum sulcatum

(Ridd.) Small

WABAUNSEE COUNTY

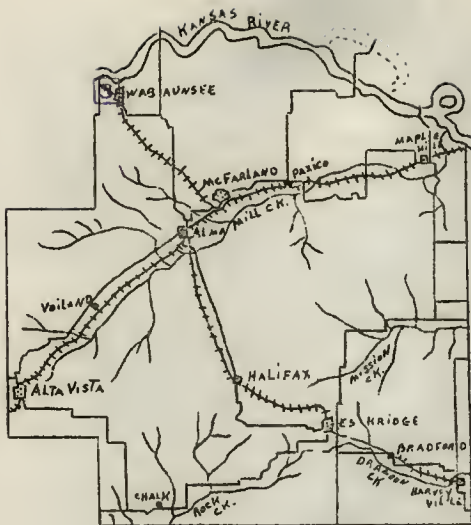
Map No. 126

BALSAMINACEAE

Impatiens pallida Nutt.



WABAUNSEE COUNTY
Map No. 127



RUTACEAE

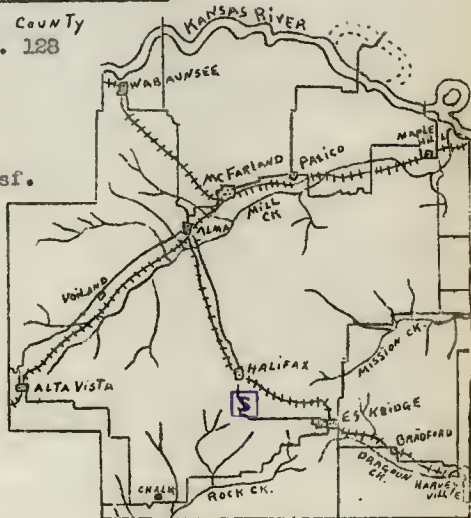
Xanthoxylum americanum

Mill.

WABAUNSEE COUNTY
Map No. 128

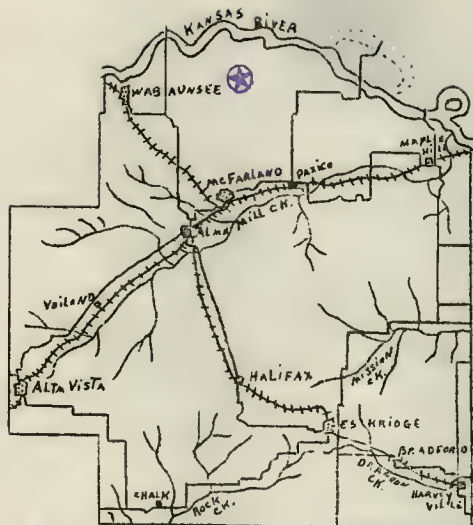
SIMARUBACEAE

Ailanthus glandulosa Desf.



WABAUNSEE COUNTY

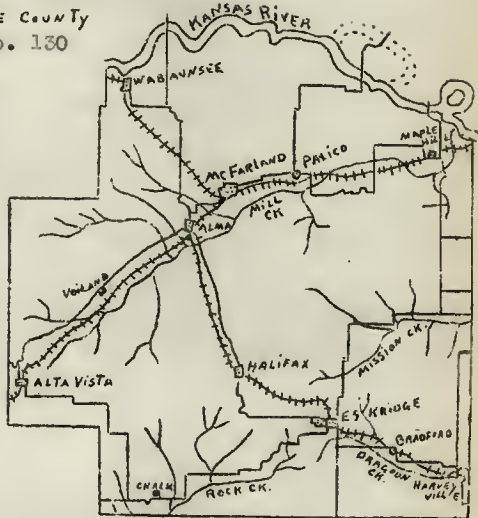
Map No. 129



POLYGALACEAE

Polygala verticillata L.

WABAUNSEE COUNTY
Map No. 130



WABAUNSEE COUNTY



EUPHORBACEAE

Tithymalopsis corollata

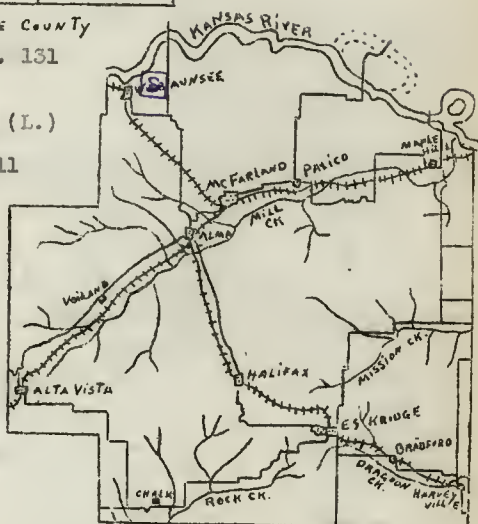
(L.) Kl. & Garcke

WABAUNSEE COUNTY

Map No. 131

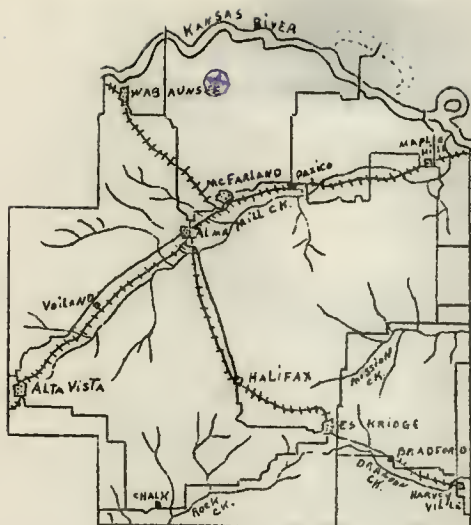
Tithymalis cyperissias (L.)

Hill



WABAUNSEE COUNTY

Map No. 132



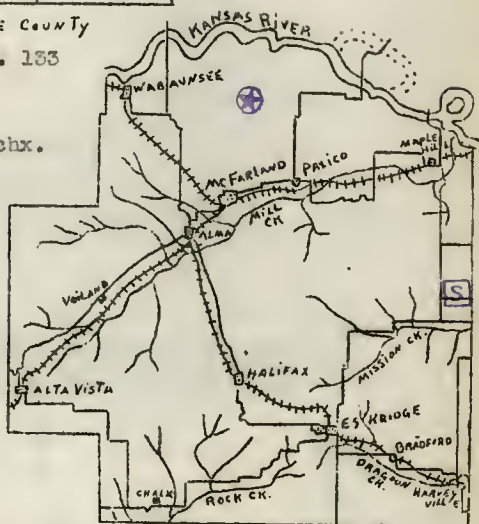
EUPHOREIACTAE

Croton capitatus Michx.

WABAUNSEE COUNTY

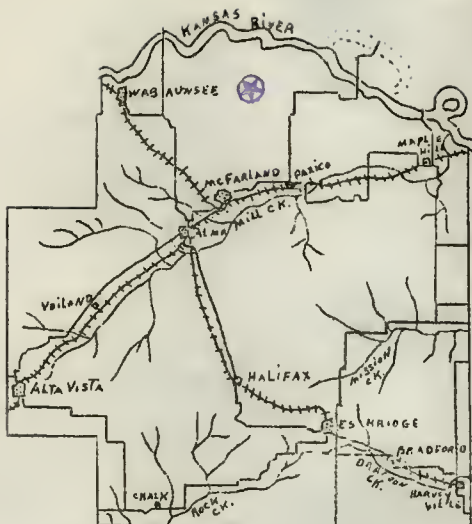
Map No. 133

Croton monathogynus Michx.



WABAUNSEE COUNTY

Map No. 134



EUPHOREBIACEAE

Poinsettia dentata

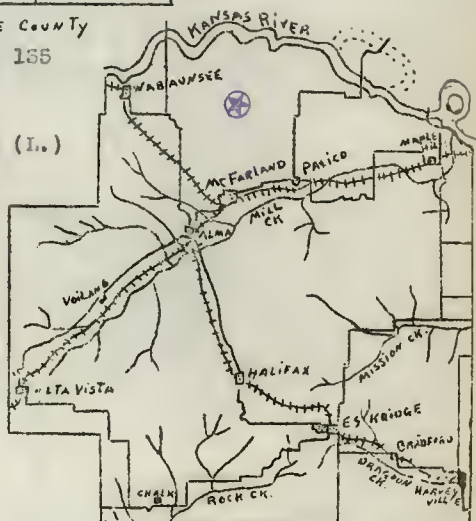
(Michx.) Small

WABAUNSEE COUNTY

Map No. 135

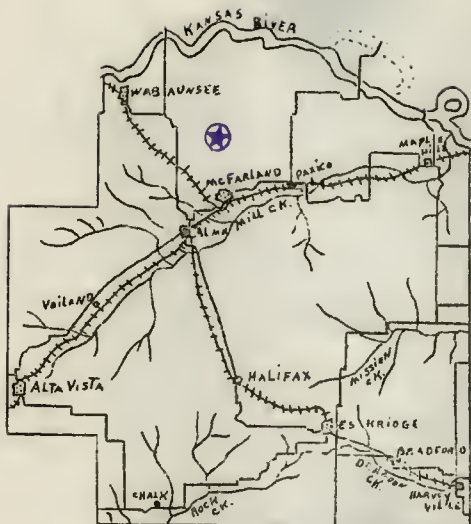
Poinsettia heterophylla (L.)

Kl. & Garcke



WABAUNSEE COUNTY

Map No. 136



EUPHORBIAEAE

Euphorbia dictyosperma

WABAUNSEE COUNTY

Map No. 137

Euphorbia nutans



WABAUNSEE COUNTY

Map No. 138



EUPHORBACEAE

Euphorbia strictospora
(Engelm.)

WABAUNSEE COUNTY

Map No. 139

Dicranophyllum marginatum

(Pursh.) Kl. & Garcke



WABAUNSEE COUNTY

Map No. 140



EUPHORBIDIACEAE

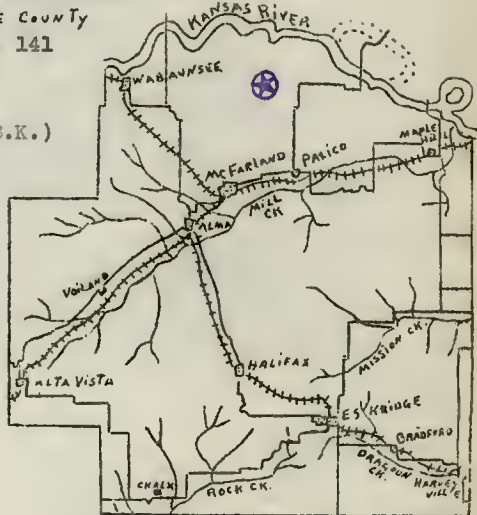
Chamaesyce maculata (L.)

Small

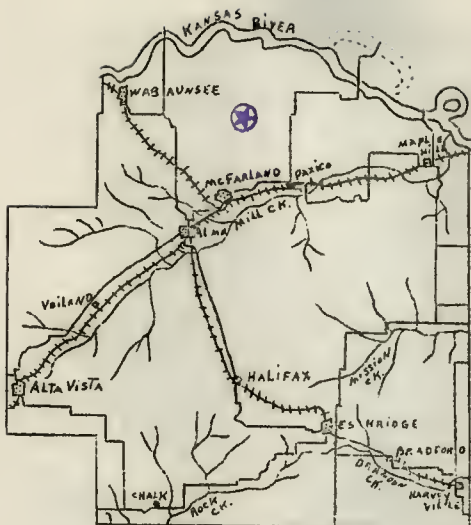
WABAUNSEE COUNTY
Map No. 141

Chamaesyce serpens (H.B.K.)

Small



WABAUNSEE COUNTY
Map No. 142



EUPHORBIACEAE

Chamaesyce zygophylloides

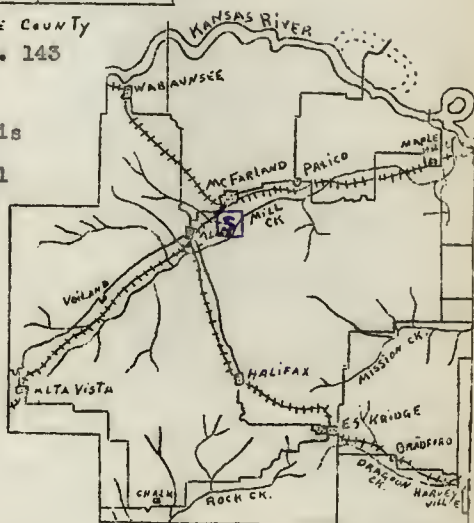
(Boiss.) Small

WABAUNSEE COUNTY

Map No. 143

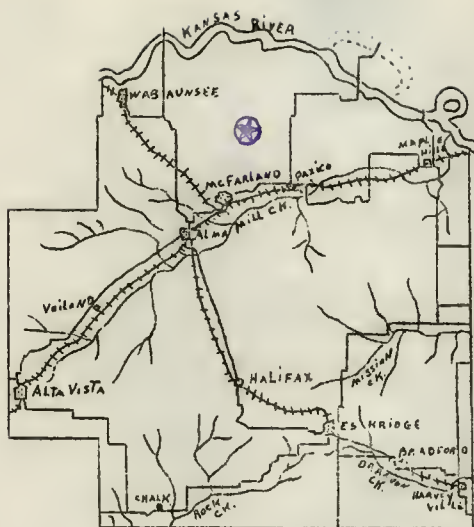
Tithymalis missouriensis

(Norton) Small



WABAUNSEE COUNTY

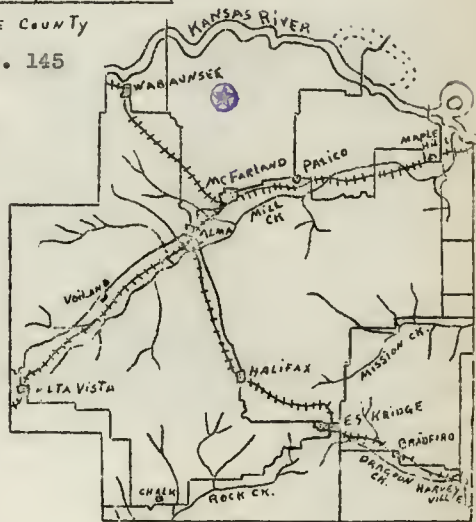
Map No. 144



WABAUNSEE COUNTY

Map No. 145

Acalypha virginica L.



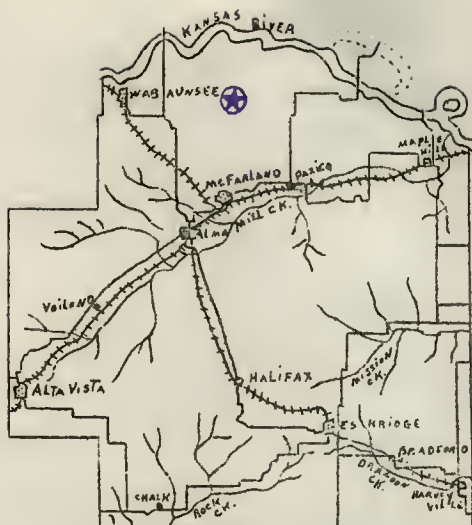
WABAUNSEE COUNTY

Map No. 146

EUPHORBIACEAE

Acalypha ostryaeifolia

Ridd.



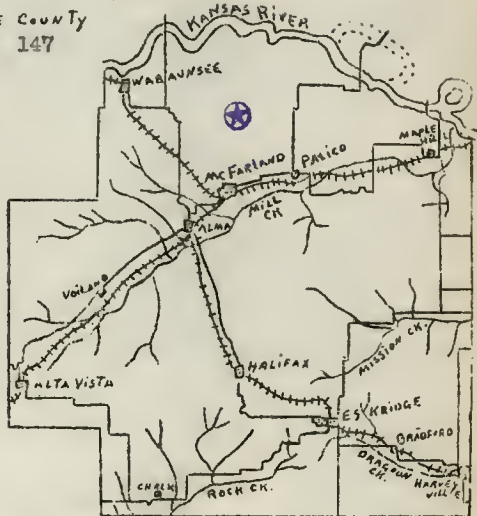
EUPHORBIACEAE

Zygophyllum hexagonum

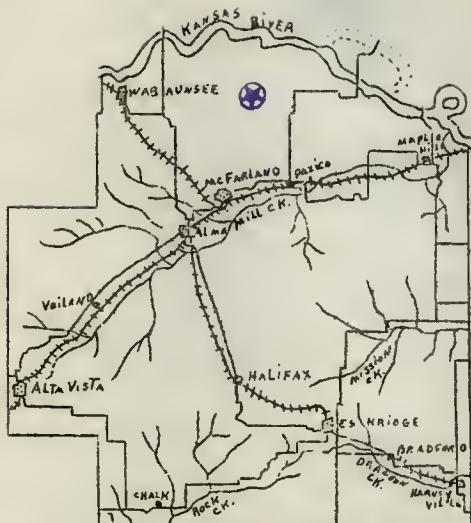
(Nutt.) Small

WABAUNSEE COUNTY
Map No. 147

Tragia ramosa Cav.



WABAUNSEE COUNTY
Map No. 148



WABAUNSEE COUNTY
Map No. 149

GUTTIFERACEAE

Hypericum cistifolium

Lam.

VIOLACEAE

Viola palmata L. cucullata

Gray



WABAUNSEE COUNTY
Map No. 150



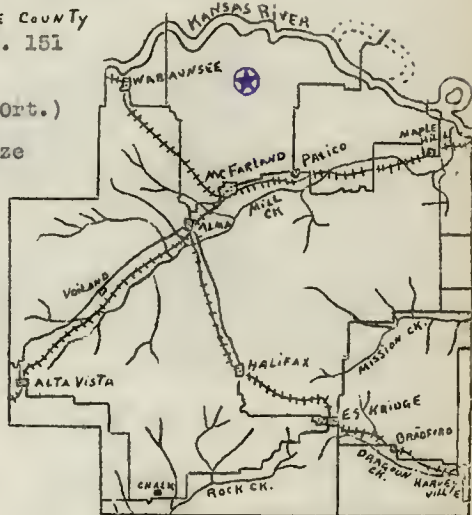
VIOLACEAE

Viola rafinesquii Green

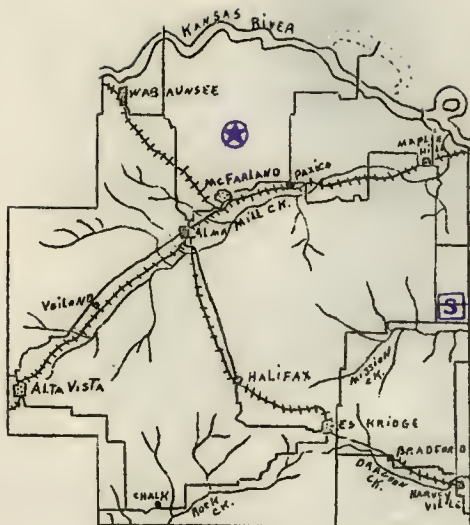
WABAUNSEE COUNTY
Map No. 151

Calceolaria alceoides (Ort.)

Kuntze



WABAUNSEE COUNTY
Map No. 152



VIOLACEAE

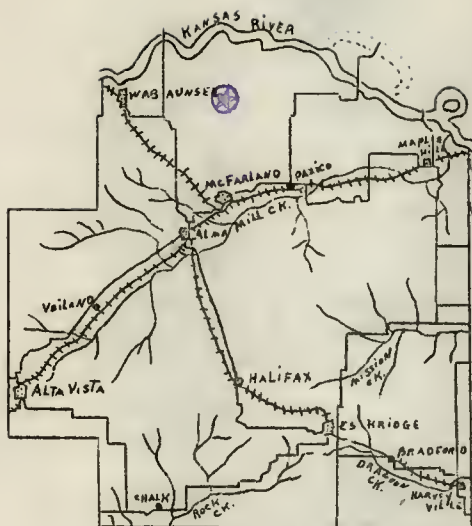
Viola pedatifida Don.

WABAUNSEE COUNTY
Map No. 153

Viola eriocarpa Schwein.



WABAUNSEE COUNTY
Map No. 154



VIOLACEAE

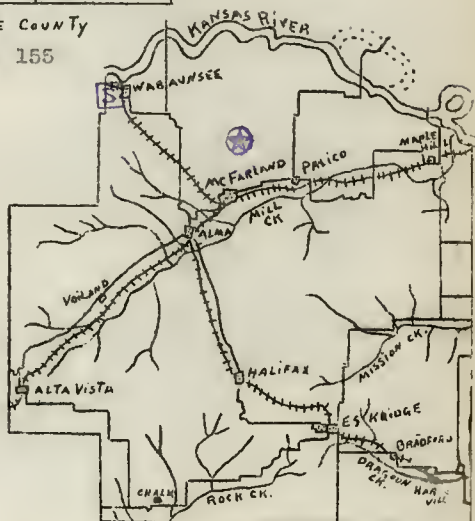
Viola papilionacea

Fursh.

WABAUNSEE COUNTY

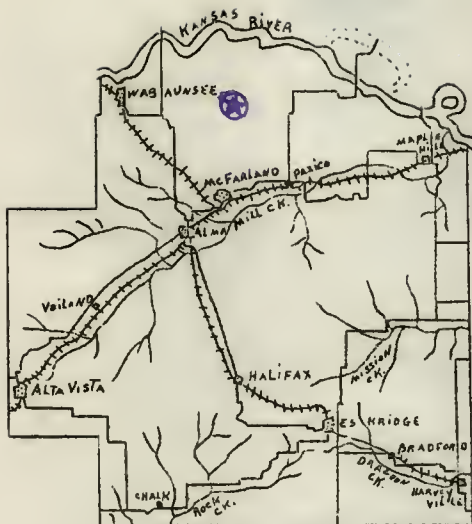
Map No. 155

Viola palmata L.



WABAUNSEE COUNTY

Map No. 156

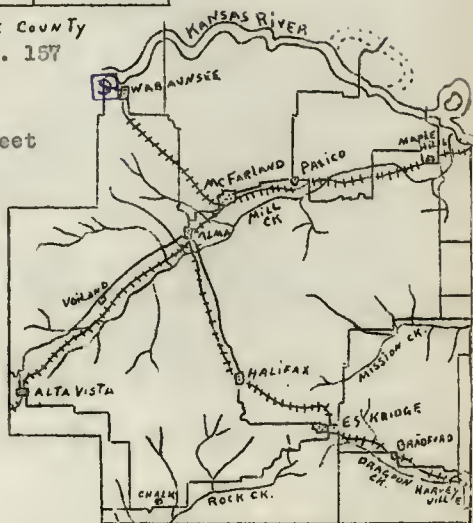


WABAUNSEE COUNTY
Map No. 157

PAPAVERACEAE

Argemone alba Lestib.

Argemone intermedia Sweet
(probably)



WABAUNSEE COUNTY
Map No. 158



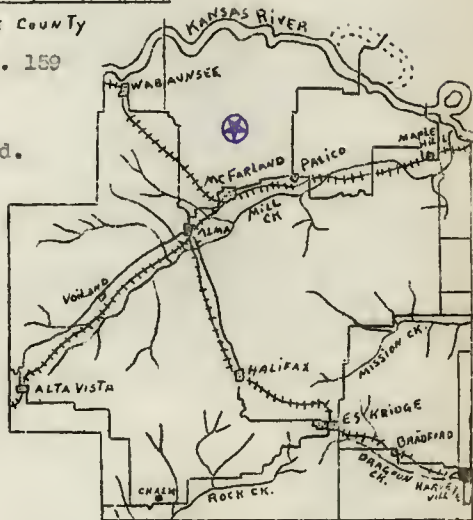
BRASSICACEAE

Thlaspi arvense L.

WABAUNSEE COUNTY

Map No. 159

Lepidium apetalum Willd.



WABAUNSEE COUNTY

Map No. 160



BRASSICACEAE

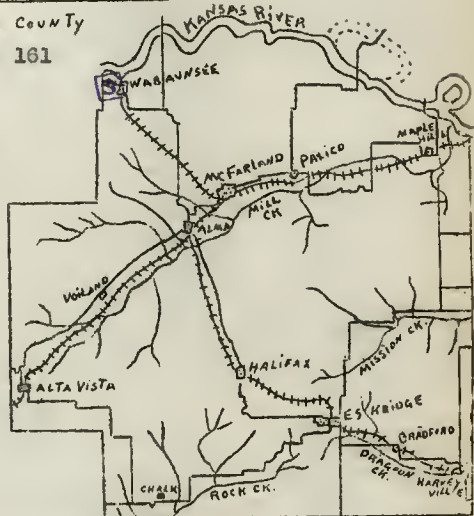
Arabis canadensis L.

WABAUNSEE COUNTY

Map No. 161

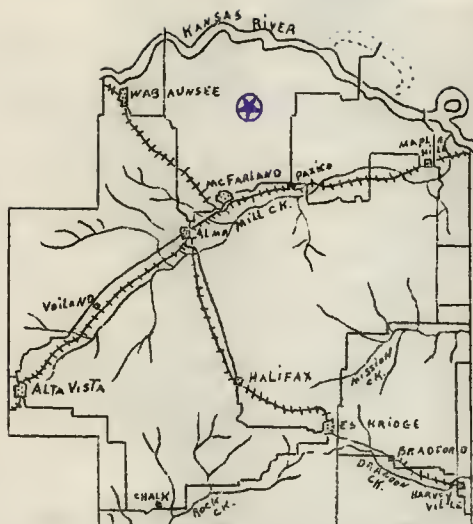
Radicula sinuata (Nutt.)

Greene



WABAUNSEE COUNTY

Map No. 162



BRASSICACEAE

Radicula palustris (L.)

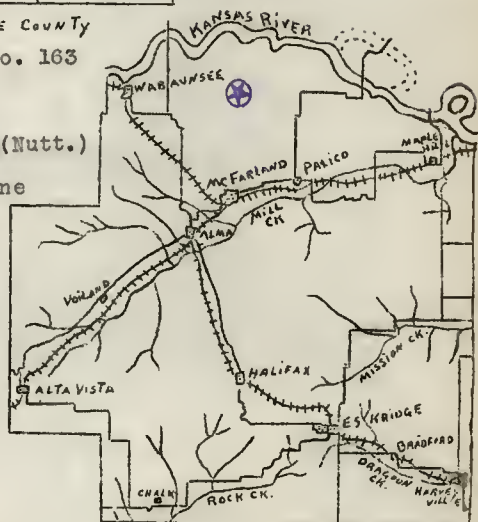
Moench

WABAUNSEE COUNTY

Map No. 163

Radicula sessiliflora (Nutt.)

Greene



WABAUNSEE COUNTY

Map No. 164

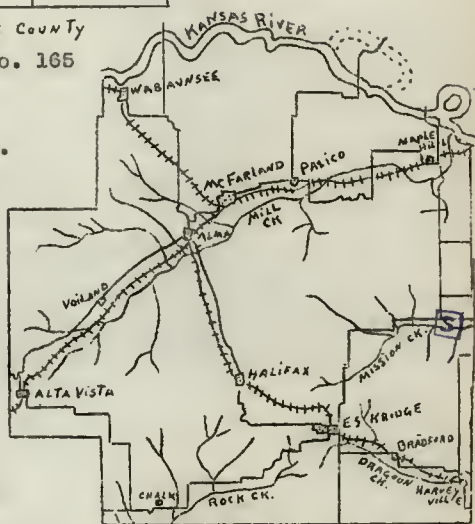


DRASSIACEAE

Alliaria alliaria Britton

WABAUNSEE COUNTY
Map No. 165

Dentaria laciniata Muhl.



WABAUNSEE COUNTY
Map No. 166



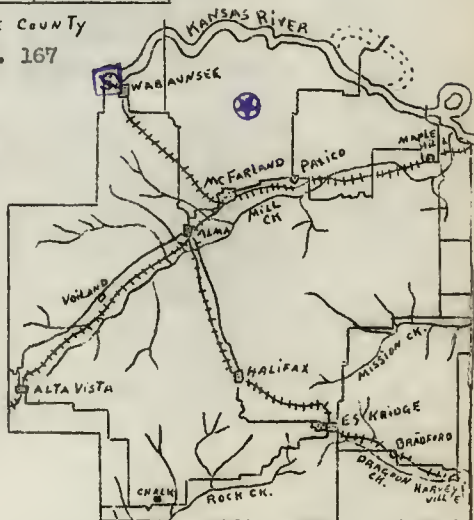
BRASSICACEAE

Draba caroliniana Walt.

WABAUNSEE COUNTY

Map No. 167

Draba cuneifolia Nutt.



WABAUNSEE COUNTY

Map No. 168



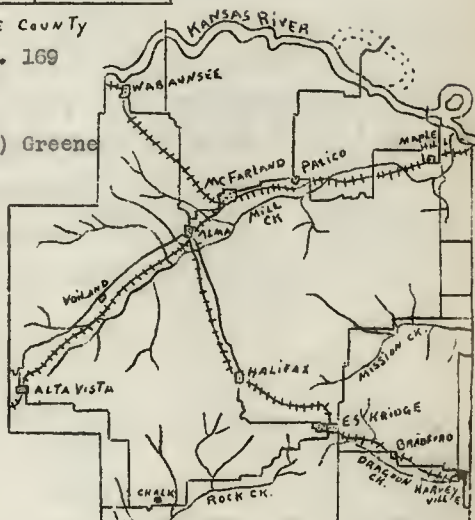
BRASSICACEAE

Sophia atrovirens (?)

WABAUNSEE COUNTY

Map No. 169

Sophia incisa (Engelm.) Greene



WABAUNSEE COUNTY

Map No. 170



WABAUNSEE COUNTY
Map No. 171

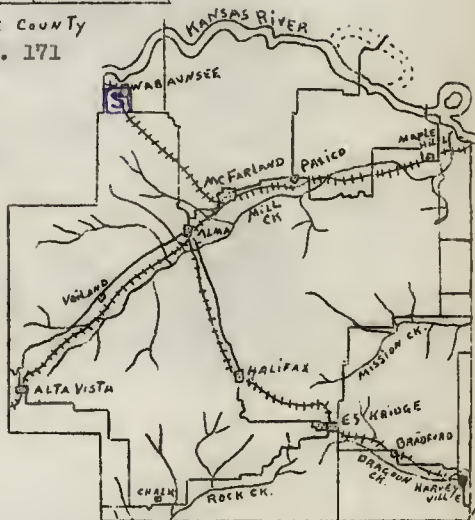
ERASSICACEAE

Bursa bursa-pastoris

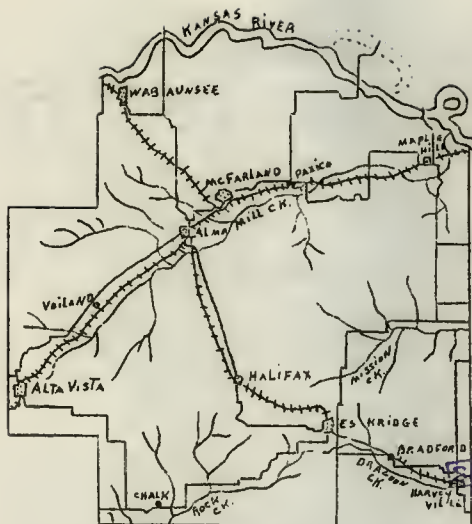
(L.) Britton

Sophia pinnata (Walt.)

Howell



WABAUNSEE COUNTY
Map No. 172



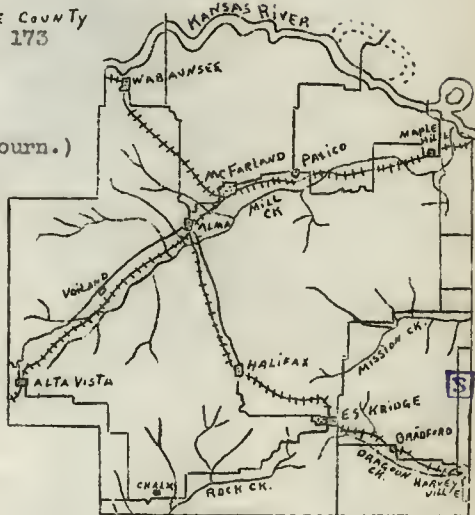
BRASSICACEAE

Brassica campestris L.

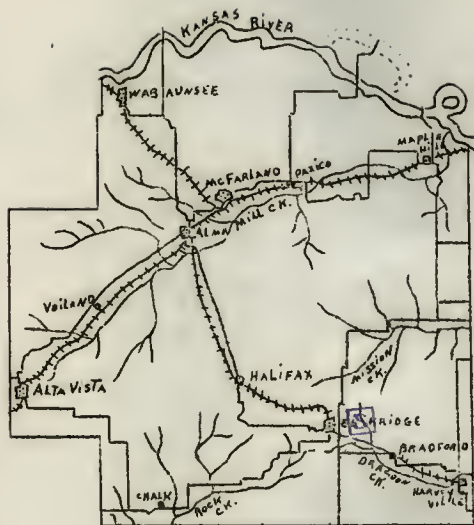
WABAUNSEE COUNTY
Map No. 173

Lepidium virginicum (Tourn.)

L.



WABAUNSEE COUNTY
Map No. 174



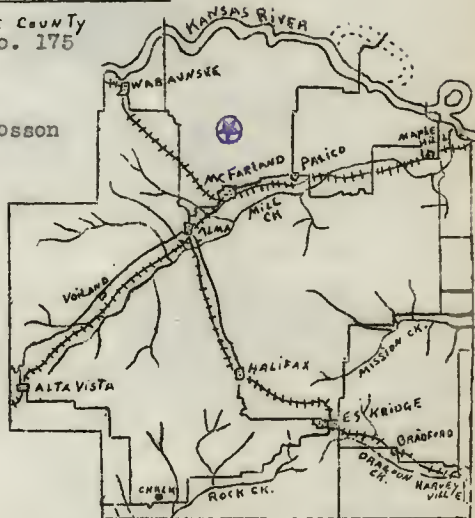
BRASSICACEAE

Brassica nigra (L.)

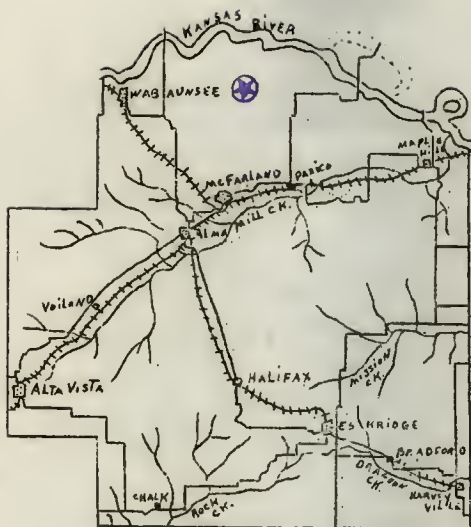
Koch

WABAUNSEE COUNTY
Map No. 175

Brassica juncea (L.) Cosson



WABAUNSEE COUNTY
Map No. 176

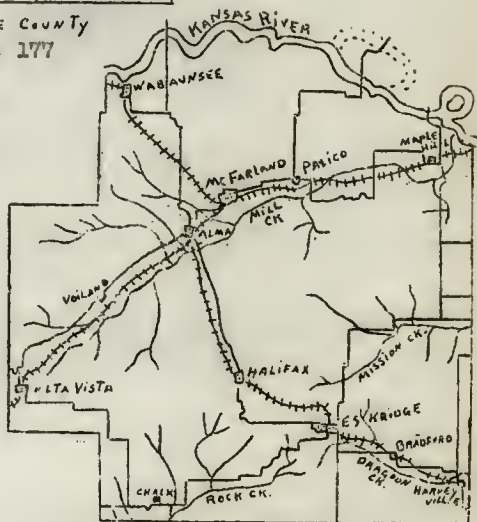


BRASSICACEAE

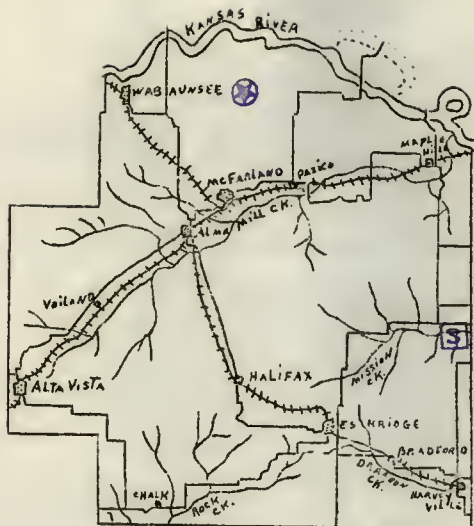
Erysimum officinale

(L.) Scop.

WABAUNSEE COUNTY
Map No. 177



WABAUNSEE COUNTY



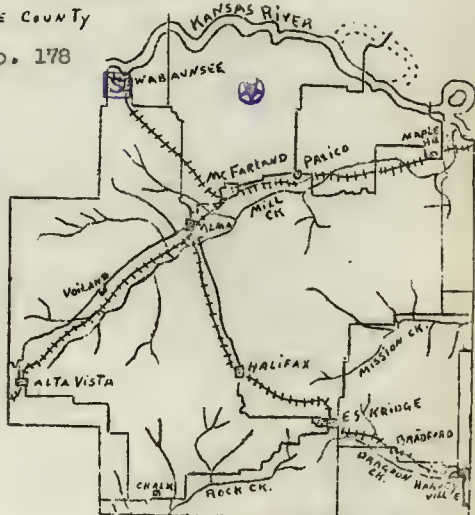
CARYOPHYLLACEAE

Saponaria officinalis L.

WABAUNSEE COUNTY

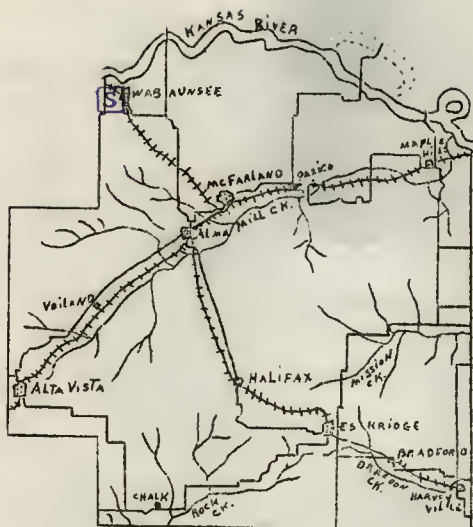
Map No. 178

Silene antirrhina L.



WABAUNSEE COUNTY

Map No. 179

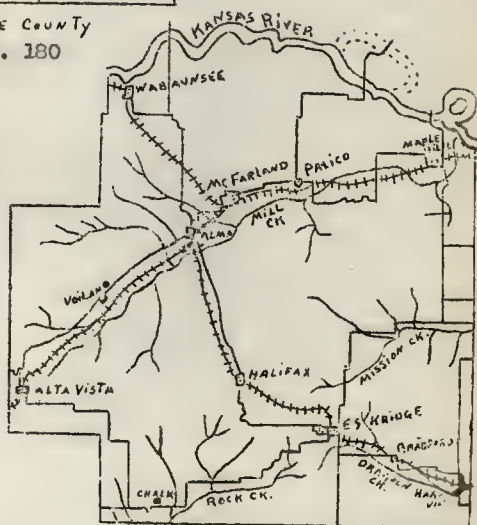


CARYOPHYLLACEAE

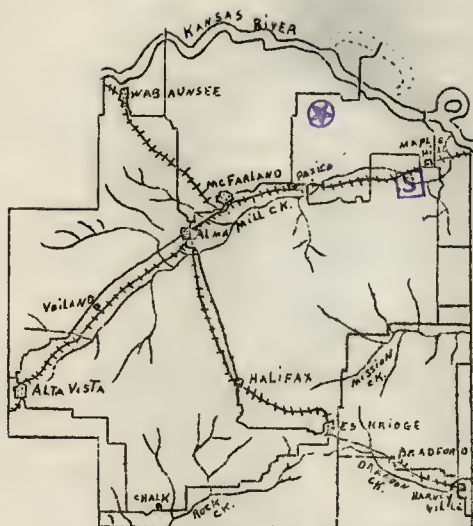
Cerastium brachypodium

Engelm.

WABAUNSEE COUNTY
Map No. 180



WABAUNSEE COUNTY



CARYOPHYLLACEAE

Silene stellata (L.)

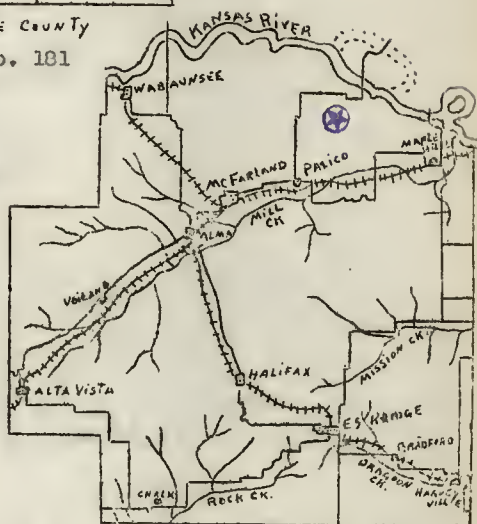
Ait.

WABAUNSEE COUNTY

Map No. 181

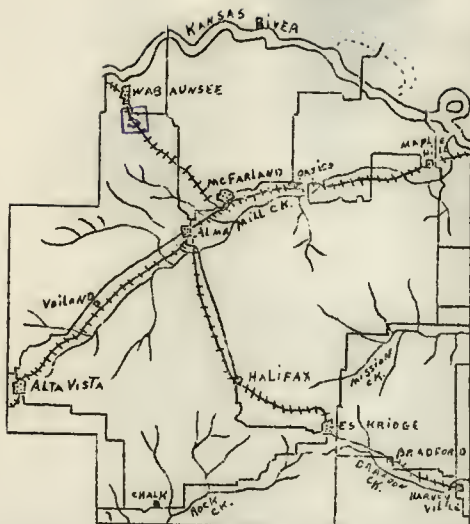
PORTULACACEAE

Portulaca oleraceae L.



WABAUNSEE COUNTY

Map No. 182



SALICACEAE

Populus sargentii Dode

WABAUNSEE COUNTY

Map No. 183

Populus deltoides Marsh



WABAUNSEE COUNTY

Map No. 184



SALICACEAE

Populus alba L.

WABAUNSEE COUNTY

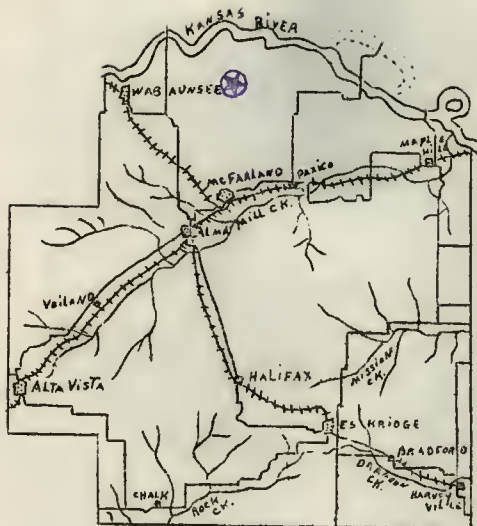
Map No. 185

Populus italica Moench.



WABAUNSEE COUNTY

Map No. 186



SALICACEAE

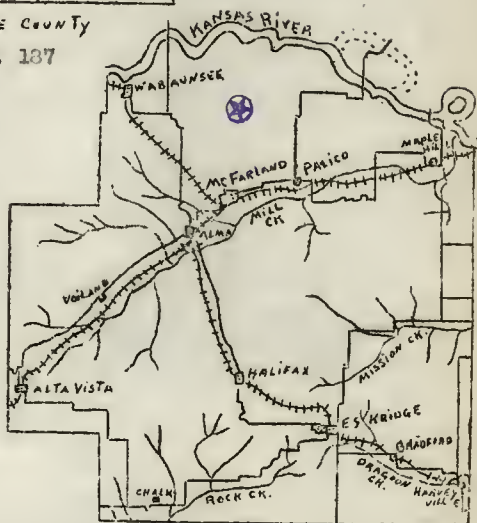
Salix amygdaloides

Anders.

WABAUNSEE COUNTY

Map No. 137

Salix cordata Muhl.



WABAUNSEE COUNTY

Map No. 138



SALICACEAE

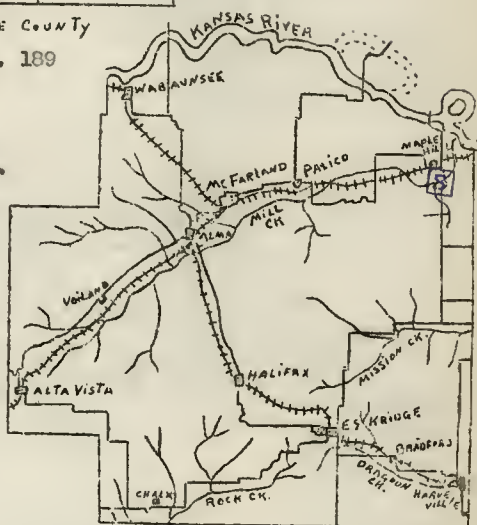
Salix longifolia Muhl.

WABAUNSEE COUNTY

Map No. 189

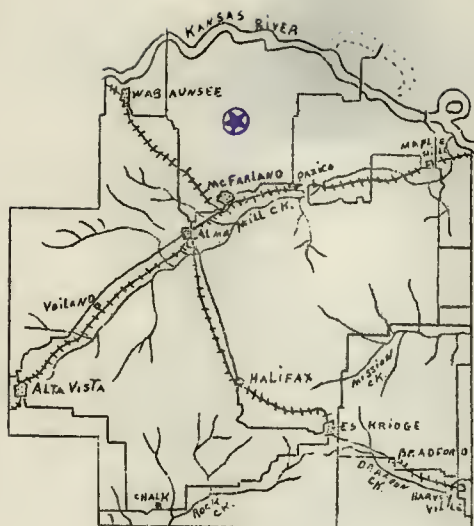
PHYTOLACCACEAE

Phytolacca americana L.



WABAUNSEE COUNTY

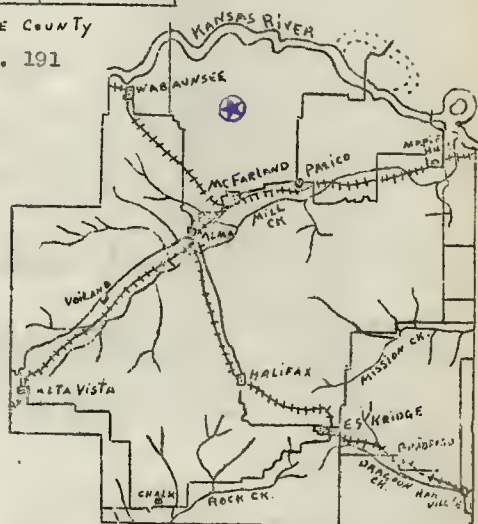
Map No. 190



WABAUNSEE COUNTY

Map No. 191

Amaranthus spinosus L.



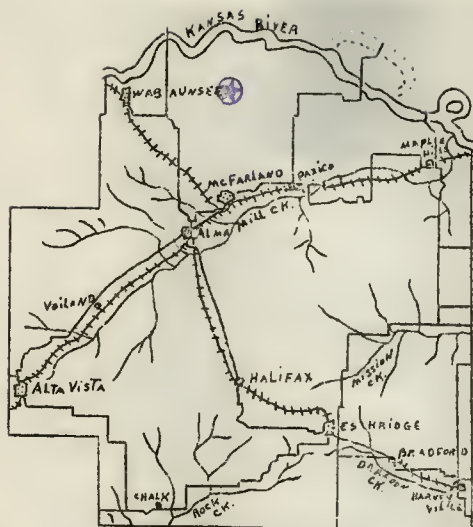
WABAUNSEE COUNTY

Map No. 192

AMARANTHACEAE

Amaranthus retroflexus

L.



AMARANTHACEAE

Amaranthus blitoides

S. Wats.

WABAUNSEE COUNTY

Map No. 193

Amaranthus gracilans L.



WABAUNSEE COUNTY

Map No. 194



AMARANTHACEAE

Acnida tamariscina

(Nutt.) Wood

WABAUNSEE COUNTY

Map No. 195

CHENOPODIACEAE

Monolepsis nuttalliana

(R & S) Wats.



WABAUNSEE COUNTY

Map No. 196



CHENOPODIACEAE

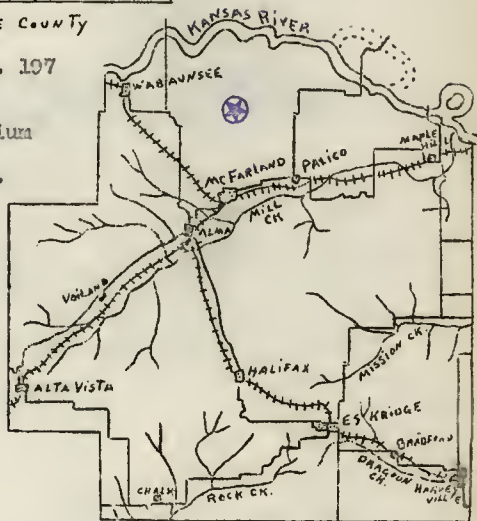
Chenopodium album L.

WABAUNSEE COUNTY

Map No. 197

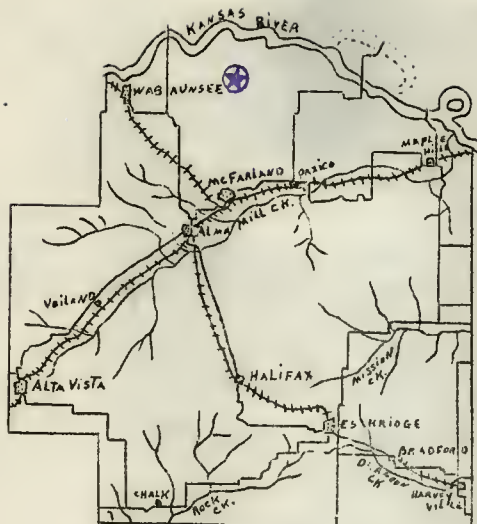
Cycloloma atriplicifolium

(Spreng.) Coult.



WABAUNSEE COUNTY

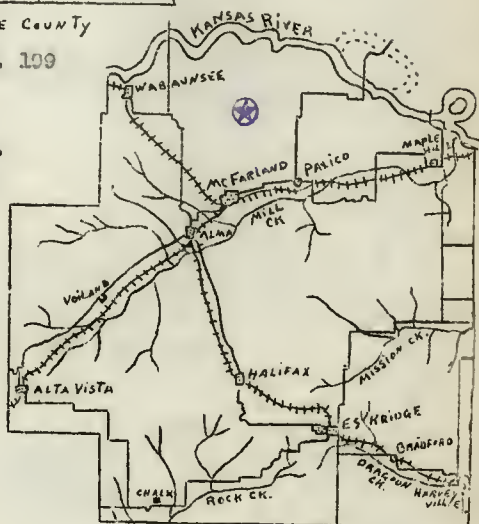
Map No. 198



WABAUNSEE COUNTY

Map No. 199

Chenopodium hybridum L.



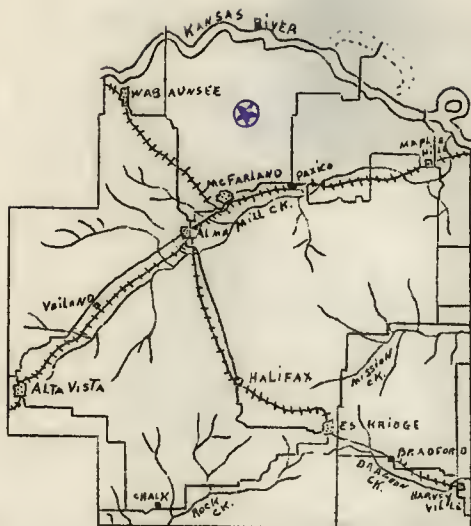
WABAUNSEE COUNTY

Map No. 200

CHENOPODIACEAE

Chenopodium boscianum

Moq.



CHENOPODIACEAE

Chenopodium leptophyllum

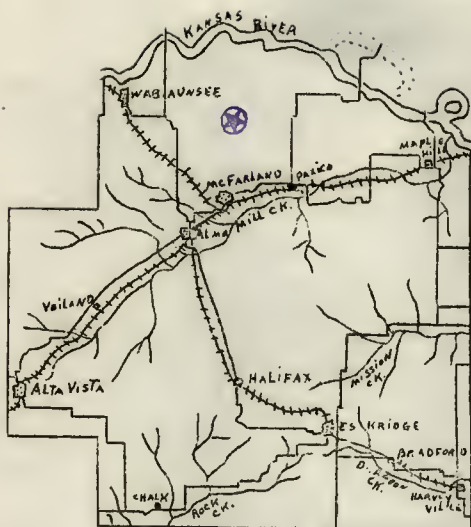
(Moq.) Nutt.

WABAUNSEE COUNTY
Map No. 201

Chenopodium leptophyllum
subglabrum S. Wats.



WABAUNSEE COUNTY
Map No. 202



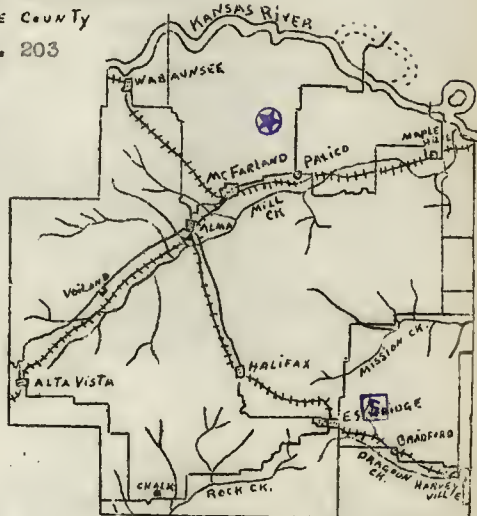
POLYGONACEAE

Rumex acetosella L.

WABAUNSEE COUNTY

Map No. 203

Rumex altissimus Wood



WABAUNSEE COUNTY

Map No. 204



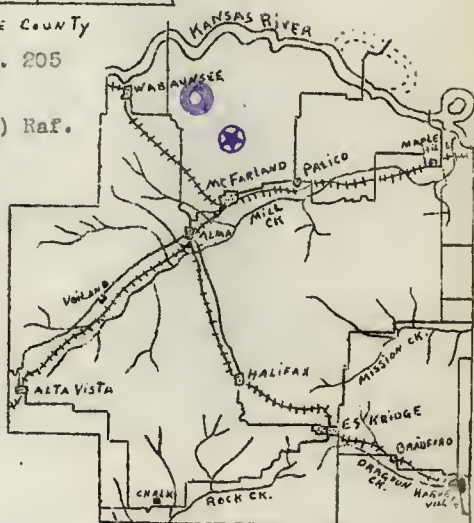
POLYGONACEAE

Rumex Britanica L.

WABAUNSEE COUNTY

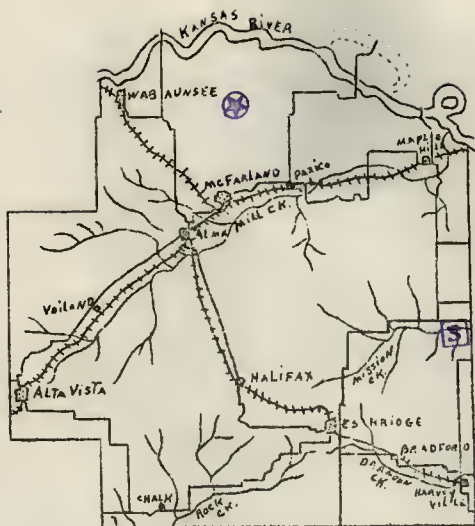
Map No. 205

Toxaria virginianum (L.) Raf.



WABAUNSEE COUNTY

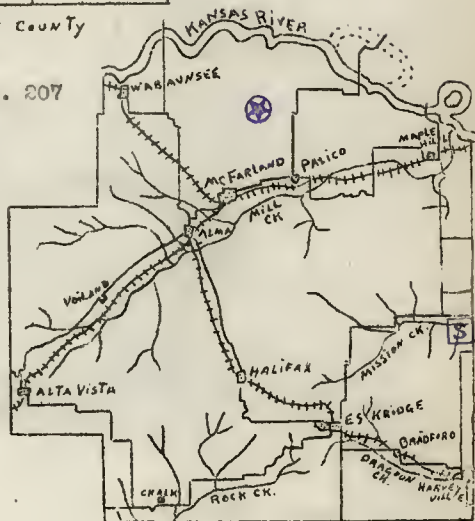
Map No. 206



WABAUNSEE COUNTY

Map No. 207

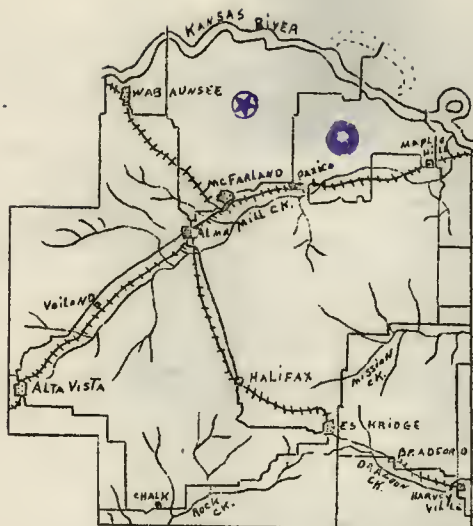
Polygonum aviculare L.



WABAUNSEE COUNTY

Map No. 208

Polygonum crispus L.



POLYGONACEAE

Polygonum erectum L.

WABAUNSEE COUNTY

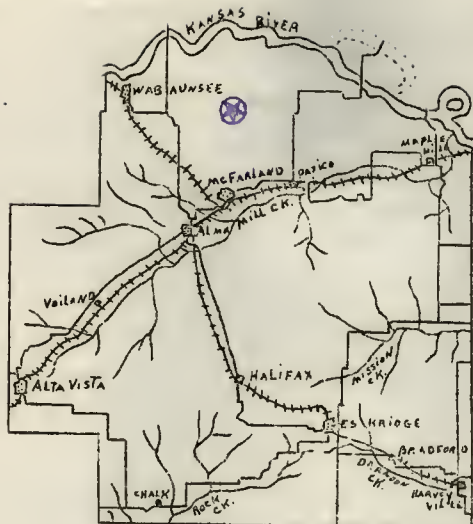
Map No. 209

Polygonum tenue Michx.



WABAUNSEE COUNTY

Map No. 210



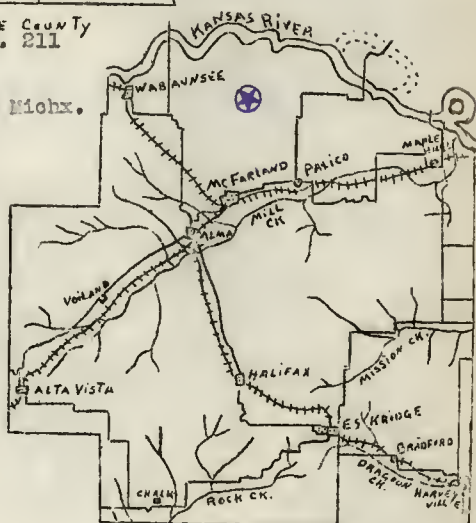
POLYGONACEAE

Polygonum littorale

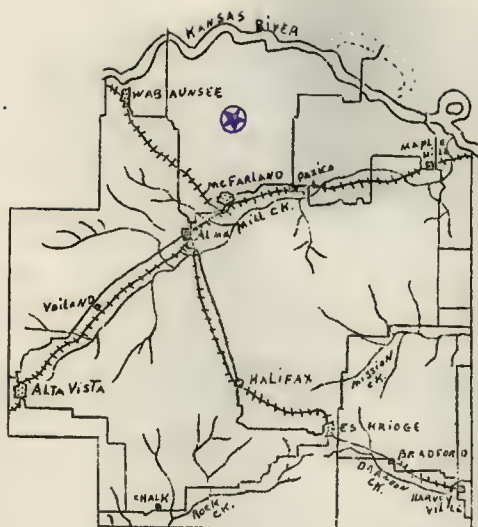
Link.

WABAUNSEE COUNTY
Map No. 211

polygonum ramosissimum Michx.



WABAUNSEE COUNTY
Map No. 212



WABAUNSEE COUNTY

Map No. 213

Persicaria punctatum Ell.



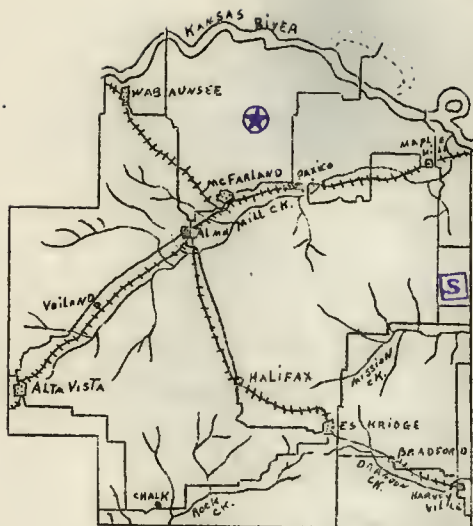
WABAUNSEE COUNTY

Map No. 214

POLYGONACEAE

Persicaria persicaria

(L.) Small



POLYGONACEAE

Persicaria lapathifolia

(L.) S.F. Gray

WABAUNSEE COUNTY

Map No. 215

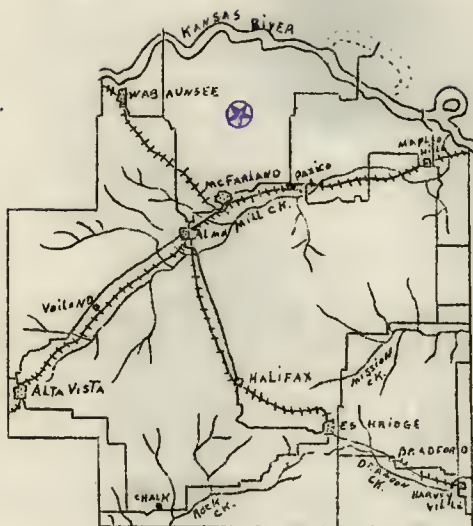
Persicaria pennsylvanicum

(L.) Small.



WABAUNSEE COUNTY

Map No. 216



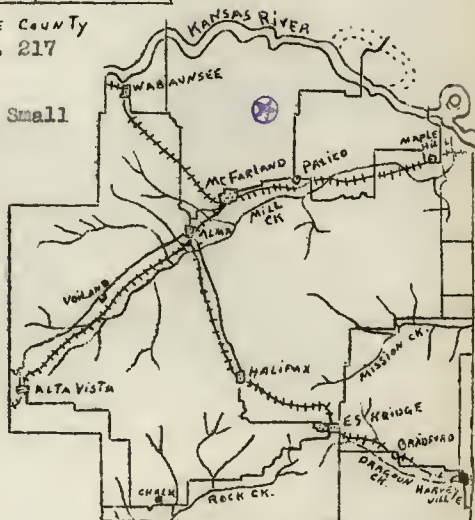
WABAUNSEE COUNTY
Map No. 217

POLYGONACEAE

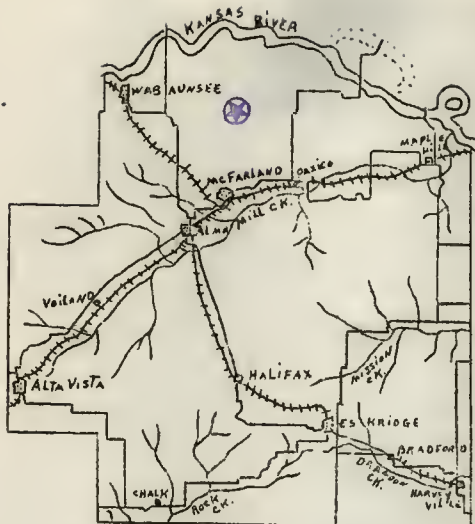
Persicaria muhlenbergii

(S.Wats.) Small

Tinaria scandens (L.) Small



WABAUNSEE COUNTY
Map No. 218



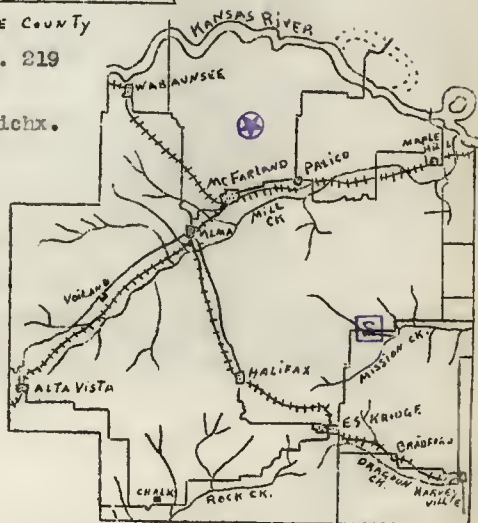
NYCTAGINACEAE

Allionia albida Walt.

WABAUNSEE COUNTY

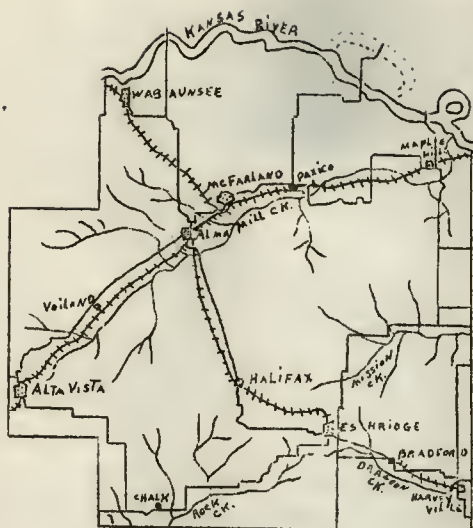
Map No. 219

Allionia nyctaginous Michx.



WABAUNSEE COUNTY

Map No. 220



NYCTAGINACEAE

Allionia linearis

Pursh.

WABAUNSEE COUNTY
Map No. 221



WABAUNSEE COUNTY



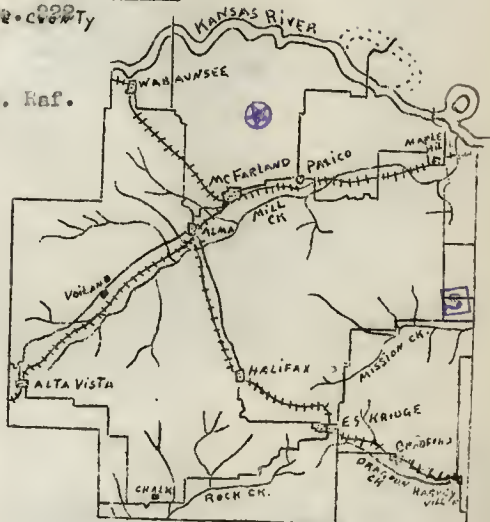
PRIMULACEAE

Androsace occidentalis

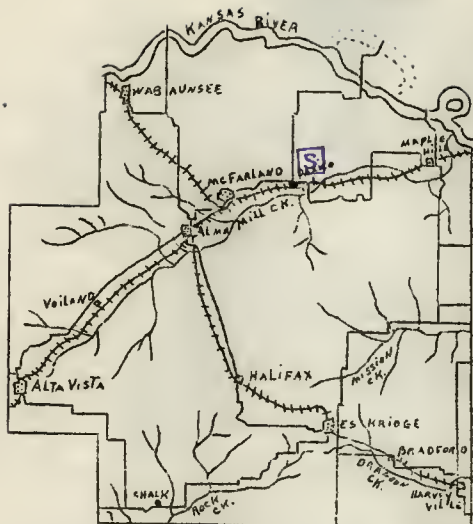
Pursh.

WABAUNSEE COUNTY

Steironema ciliatum L. Raf.



Map No. 223
WABAUNSEE COUNTY



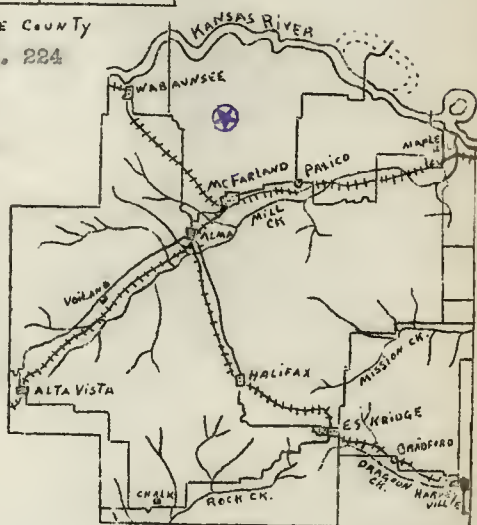
WABAUNSEE COUNTY

Map No. 224

PLANTAGINACEAE

Plantago lanceolata L.

Plantago rugelii Dene.



WABAUNSEE COUNTY

Map No. 225



PLANTAGINACEAE

Plantago virginica L.

WABAUNSEE COUNTY

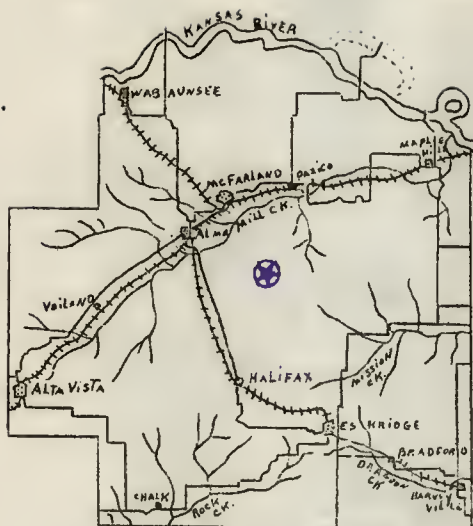
Map No. 226

Plantago media L.



WABAUNSEE COUNTY

Map No. 227



PLANTAGINACEAE

Plantago aristata

Michx.

WABAUNSEE COUNTY

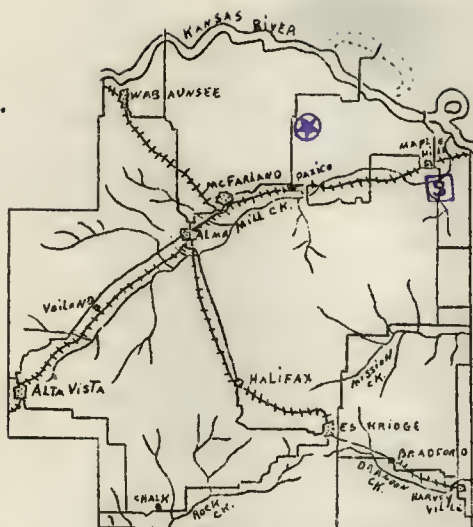
Map No. 228

Plantago purshii R. & S.



WABAUNSEE COUNTY

Map No. 229

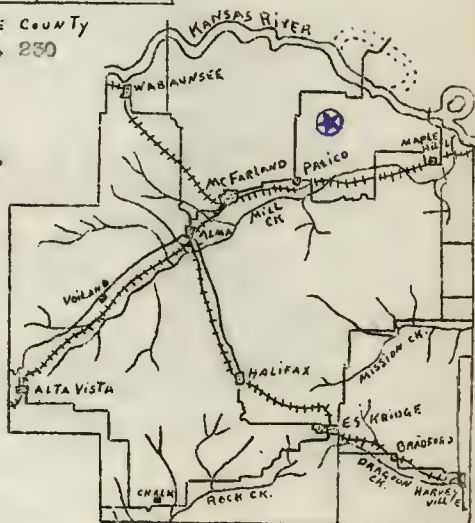


CONVOLVULACEAE

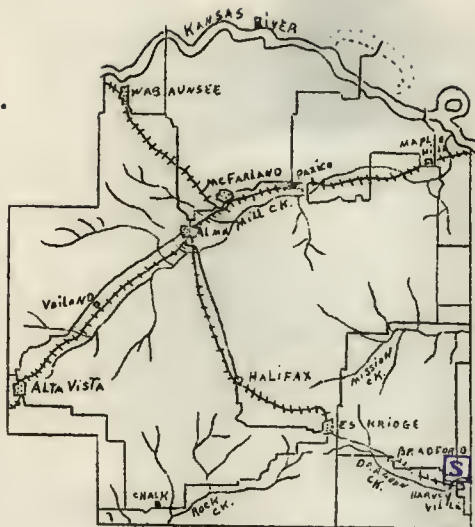
Convolvulus sepium L.

WABAUNSEE COUNTY
Map No. 230

Evolvulus pilosus Nutt.



WABAUNSEE COUNTY
Map No. 231



POLYMONIACEAE

Polygonum divaricatum L.

WABAUNSEE COUNTY

Map No. 232

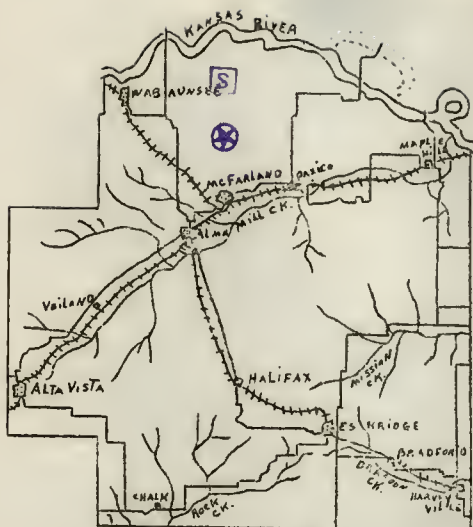
CONVOLVULACEAE

Convolvulus repens L.



WABAUNSEE COUNTY

Map No. 233



CONVOLVULACEAE

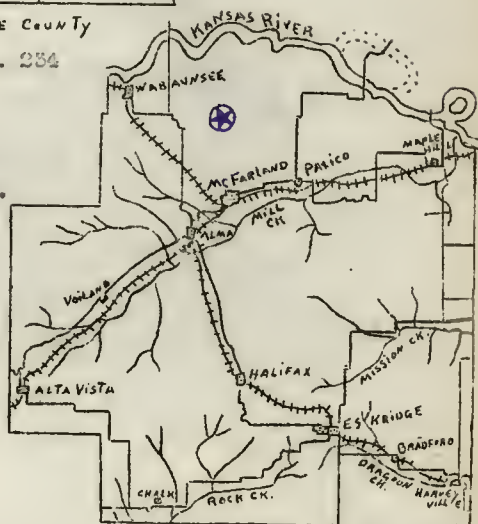
Ipomoea hederaeformis Jacq.

WABAUNSEE COUNTY

Map No. 234

Ipomoea pandurata (L.)

G.F.W. Mey.



WABAUNSEE COUNTY

Map No. 235



CONVOLVULACEAE

Ipomoea purpurea (L.)

Roth.

WABAUNSEE COUNTY

Map No. 256

Cuscuta polygonorum Engel.



WABAUNSEE COUNTY

Map No. 287



HYDROPHYLLUM LACTALE

Hydotes hysteron (L.)

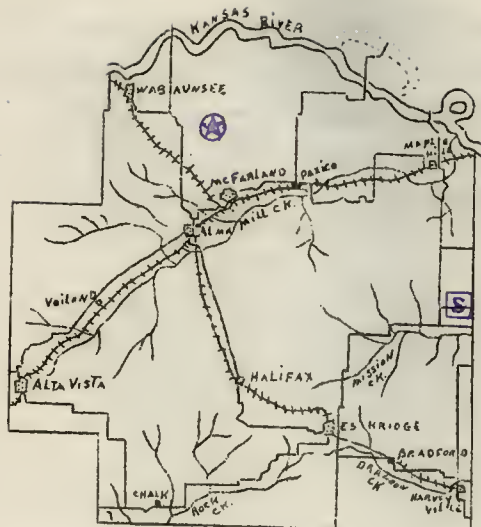
Britton

WABAUNSEE COUNTY

Hydrophyllum virginianum L.



Map No. 239
WABAUNSEE COUNTY



WABAUNSEE

Lithospermum linearifolium
Goldie.

WABAUNSEE COUNTY

Map No. 240

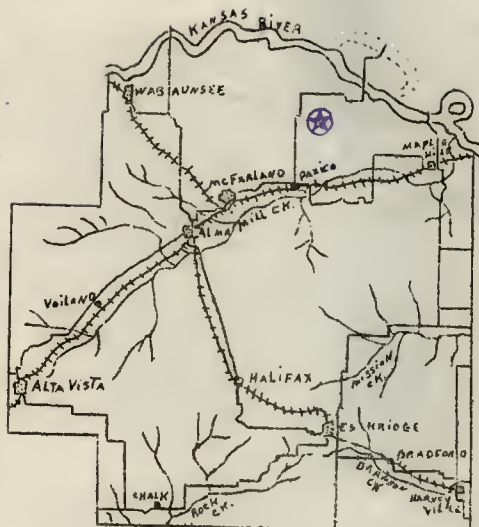
Onosmodium occidentale

Mackenzie



WABAUNSEE COUNTY

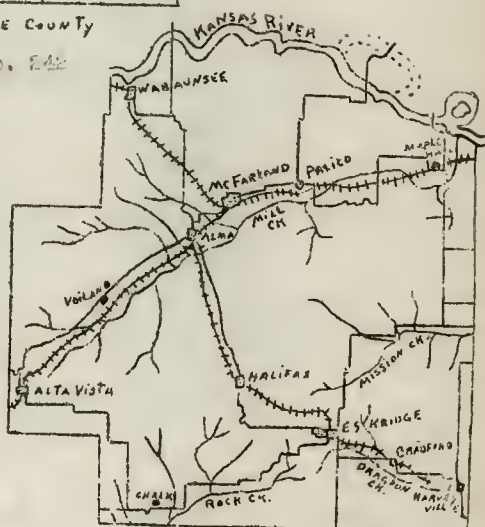
Map No. 241



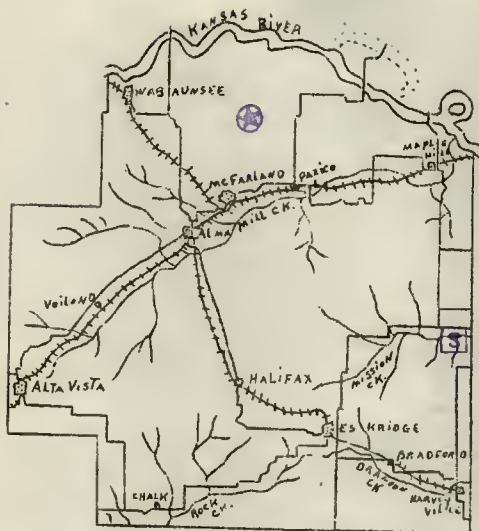
LORAGI A.C.L.E
 Lippula virginiana
 (L.) Greene

WABAUNSEE COUNTY

Map 10. 242



WABAUNSEE COUNTY



SOLANACEAE

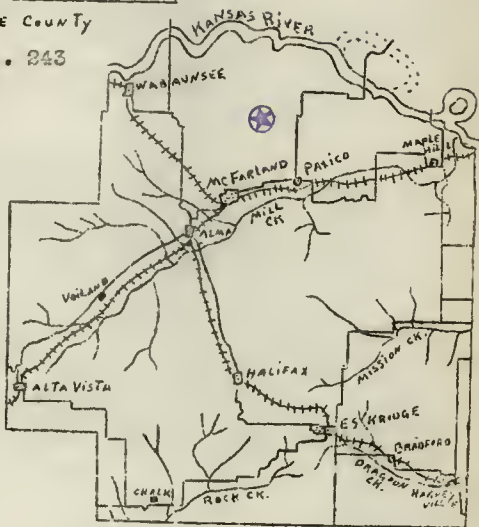
Solanum rostratum

Dunal.

WABAUNSEE COUNTY

Map No. 243

Solanum nigrum L.



WABAUNSEE COUNTY

Map No. 244



SOLANACEAE

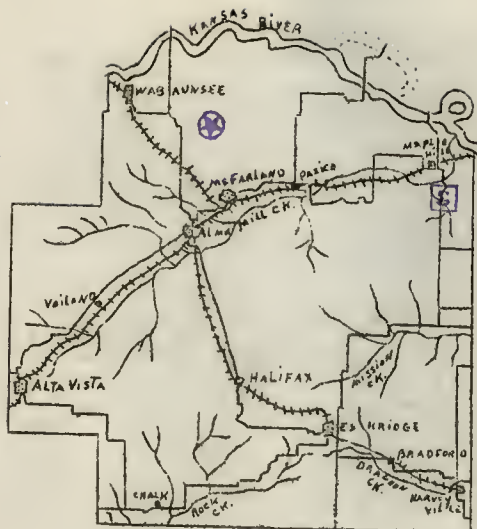
Solanum carolinense L.

WABAUNSEE COUNTY
Map No. 245

Solanum elaeagnifolium Cav.



WABAUNSEE COUNTY
Map No. 246

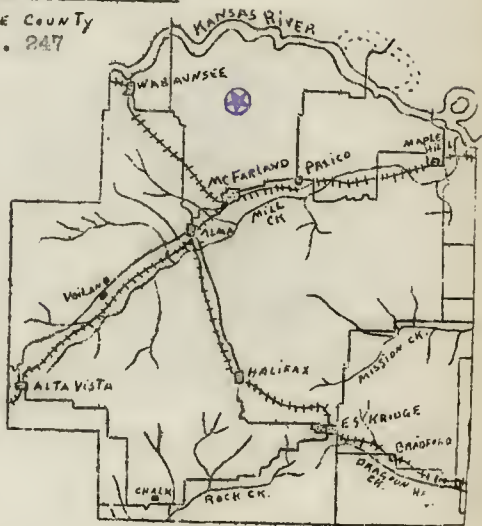


204563A1

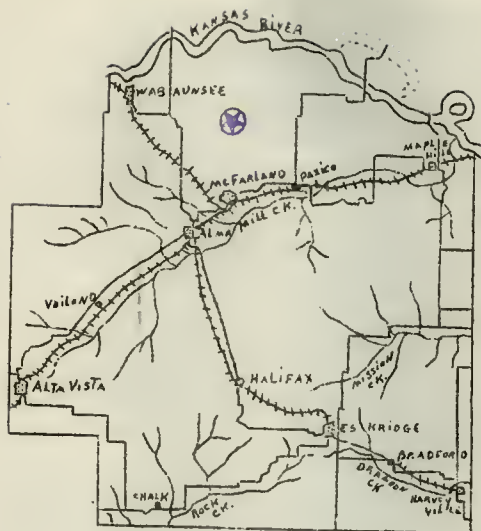
Datura stramonium L.

WABAUNSEE COUNTY
Map No. 247

Datura tatula L.



WABAUNSEE COUNTY
map No. 248



SOLEANACEAE

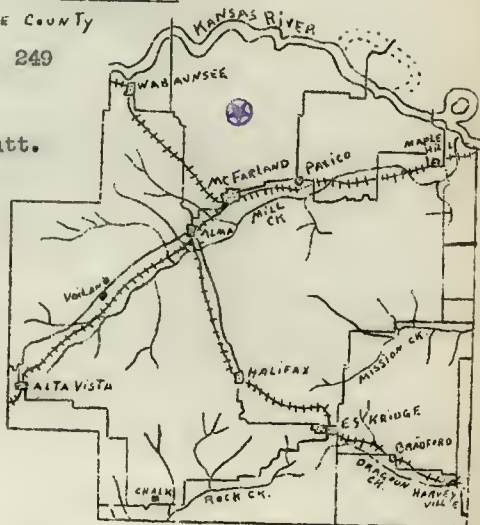
Physalis heterophylla

Nees

WABAUNSEE COUNTY

Map No. 249

Physalis longifolia Nutt.



WABAUNSEE COUNTY

Map No. 250



OLEACEAE

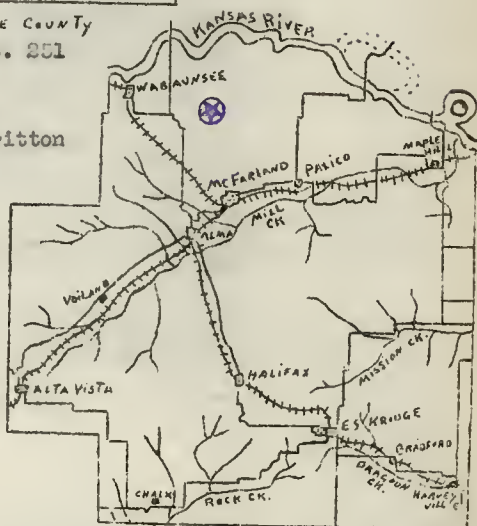
Fraxinus pennsylvanica

Marsh.

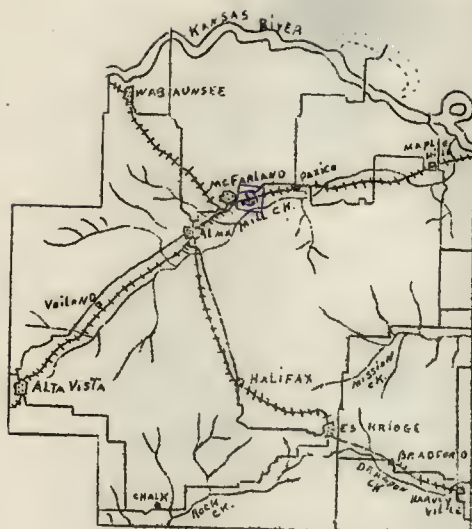
WABAUNSEE COUNTY

Map No. 251

Fraxinus campestris Britton



WABAUNSEE COUNTY
Map No. 252

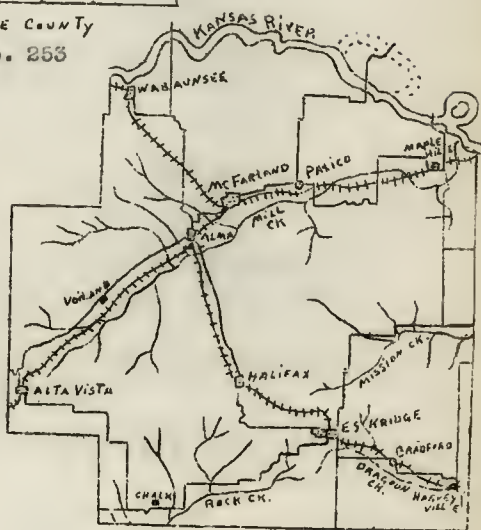


OLEACEAE

Fraxinus americana L.

WABAUNSEE COUNTY

Map No. 253



WABAUNSEE COUNTY



GENTIANACEAE

Centaurium texense

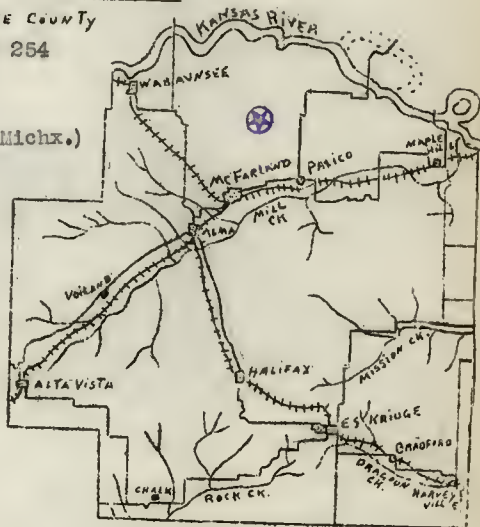
(Griseb.)

WABAUNSEE COUNTY

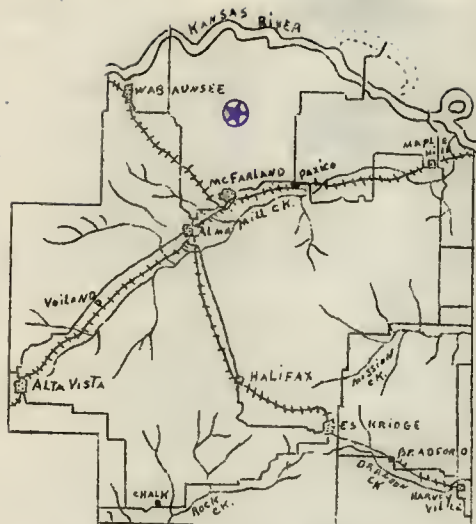
Map No. 254

Dasystephana puberula (Michx.)

Small



WABAUNSEE COUNTY
Map No. 256



APOCYNACEAE

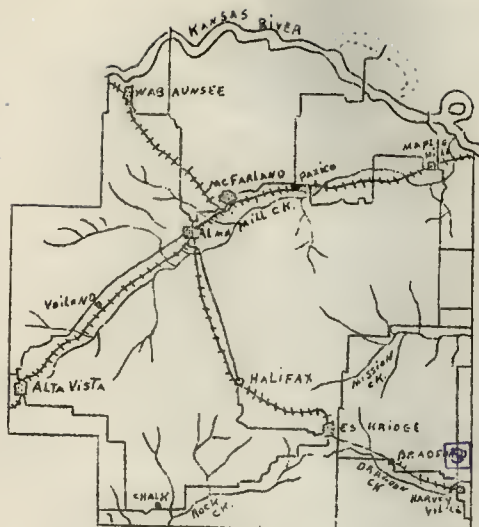
Apocynum cannabinum L.

WABAUNSEE COUNTY
Map No. 257

Apocynum sibiricum Jacq.



WABAUNSEE COUNTY
Map No. 258



ASCLEPIADACEAE

Acerates angustifolia

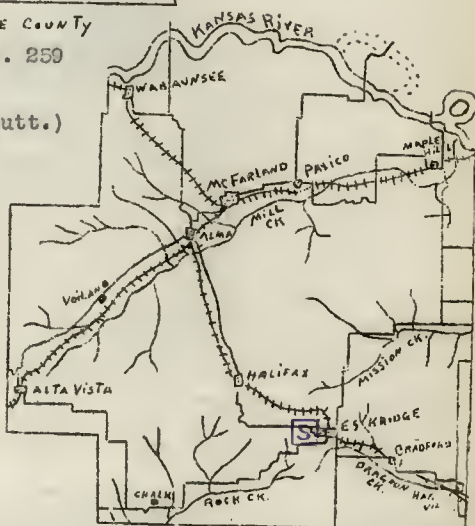
(Nutt.) Dec.

WABAUNSEE COUNTY

Map No. 259

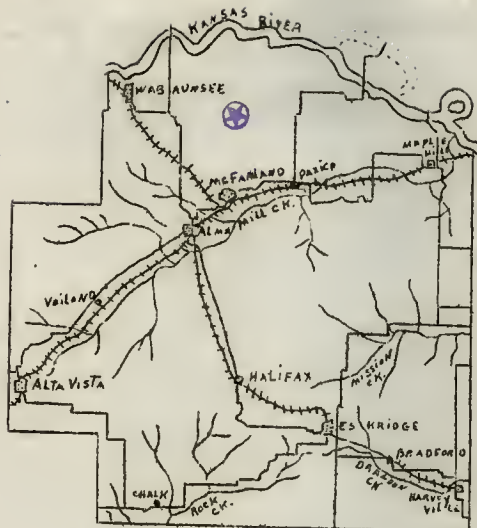
Acerates lanuginosa (Nutt.)

Dec.



WABAUNSEE COUNTY

Map No. 260



ASCLEPIADACEAE

Asclepias sullivantii

Engelm.

WABAUNSEE COUNTY

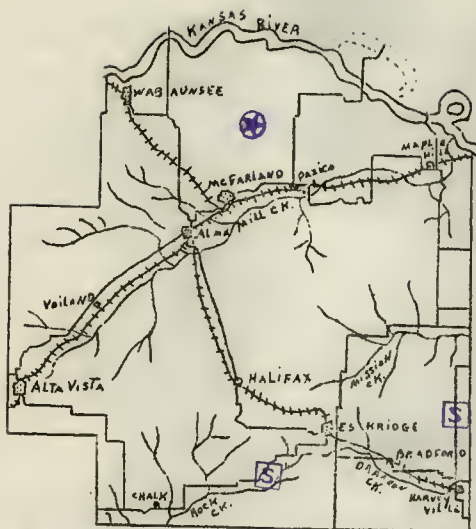
Map No. 261

Asclepias syriaca L.



WABAUNSEE COUNTY

Map No. 262



ASCLEPIADACEAE

Asclepias tuberosa L.

WABAUNSEE COUNTY

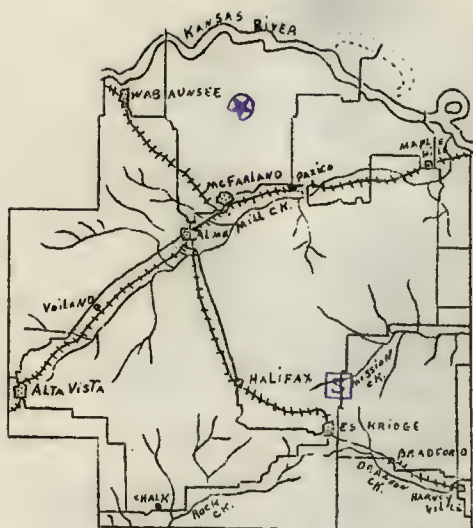
Map No. 263

Asclepias verticillata L.



WABAUNSEE COUNTY

Map No. 264



ASCLEPIADACEAE

Asclepiodora viridis

(Walt.) A. Gray

WABAUNSEE COUNTY

Map No. 265



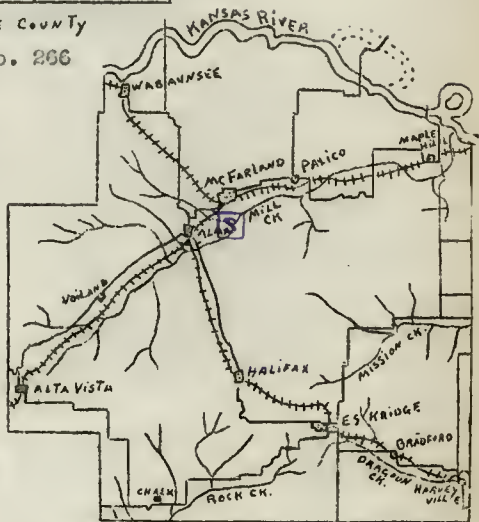
WABAUNSEE COUNTY



WABAUNSEE COUNTY

Map No. 266

Mimulus geyeri Torr.

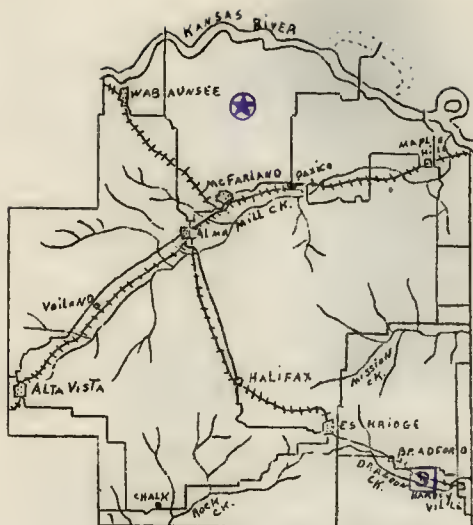


WABAUNSEE COUNTY

Map No. 267

SCROPHULARIACEAE

Mimulus ringens L.

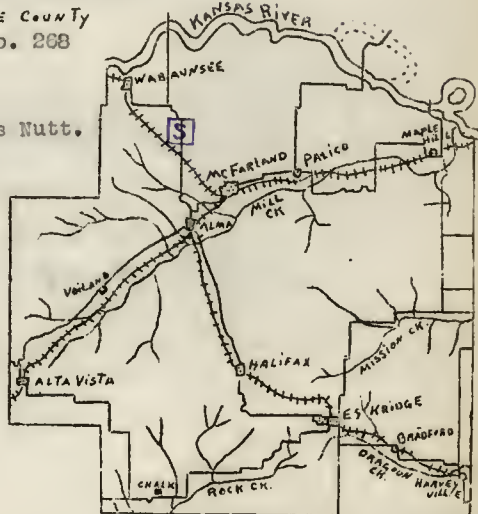


SCROPHULARIACEAE

Pentstemon cobaea Nutt.

WABAUNSEE COUNTY
Map No. 268

Pentstemon grandiflorus Nutt.



WABAUNSEE COUNTY
Map No. 269



SCROPHULARIACEAE

Verbascum thapsus

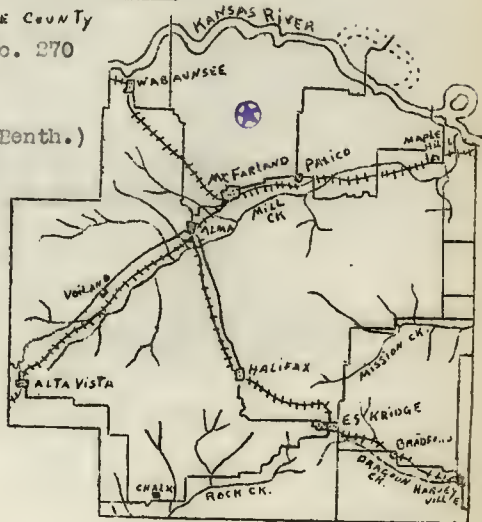
(Tourn.) L.

WABAUNSEE COUNTY

Map No. 270

Otophylla densiflora (Benth.)

Small



WABAUNSEE COUNTY

Map No. 271



SCROPHULARIACEAE

Scrophularia marylandica

L.

WABAUNSEE COUNTY

Map No. 272

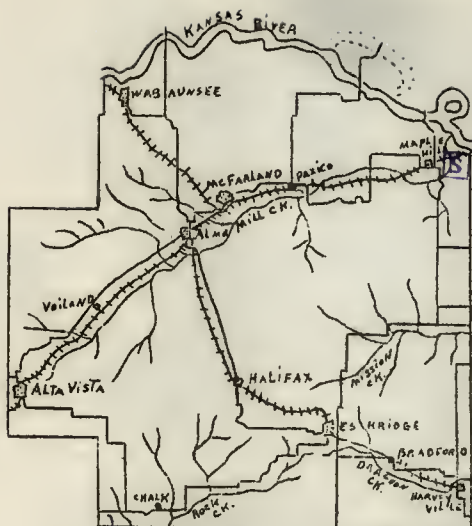
Afzelia macrophylla (Nutt.)

Kuntze



WABAUNSEE COUNTY

Map No. 273



BIGNONIACEAE

Catalpa speciosa Warder.

WABAUNSEE COUNTY

Map No. 274

LENTIBULARIACEAE

Thalesia uniflora L.



WABAUNSEE COUNTY

Map No. 275



ACANTHACEAE

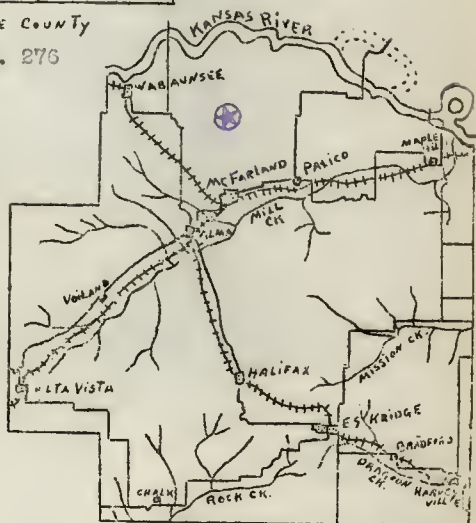
Phrysa leptostachya

L.

WABAUNSEE COUNTY

Map No. 276

Ruellia strepens L.



WABAUNSEE COUNTY

Map No. 277

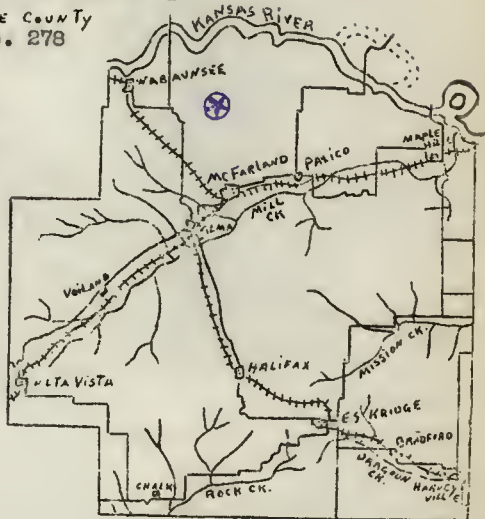


ACANTHACEAE

Ruellia ciliosa Pursh.

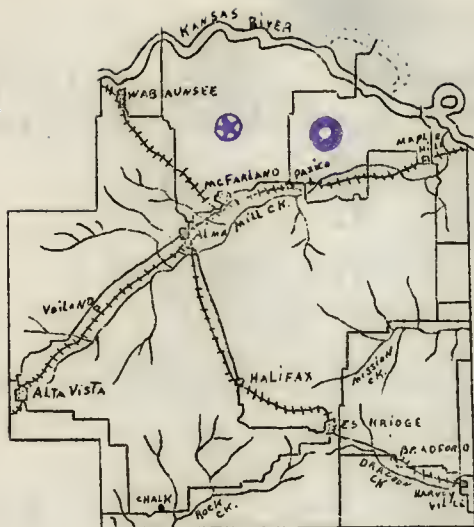
WABAUNSEE COUNTY
Map No. 278

Dianthera americana L.



WABAUNSEE COUNTY

Map No. 279



VERBENACEAE

Verbena angustifolia

Michx.

WABAUNSEE COUNTY

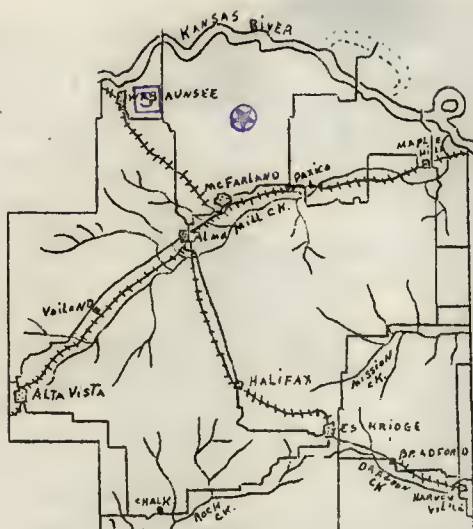
Map No. 280

Verbena bracteosa Michx.



WABAUNSEE COUNTY

Map No. 281

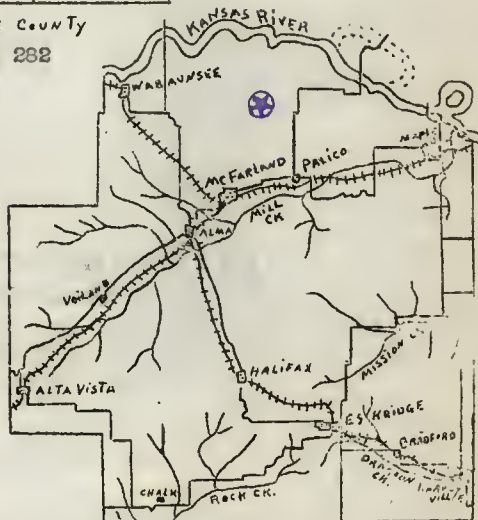


VERBENACEAE

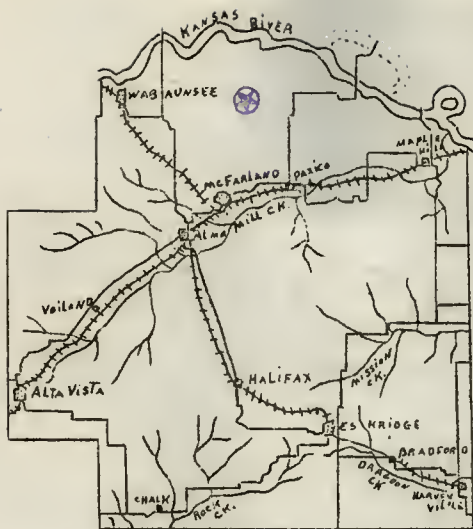
Verbena canadensis (L.)

Britton

WABUNSEE COUNTY
Map No. 282



WABUNSEE COUNTY



VERBENACEAE

Verbena hastata L.

WABAUNSEE COUNTY

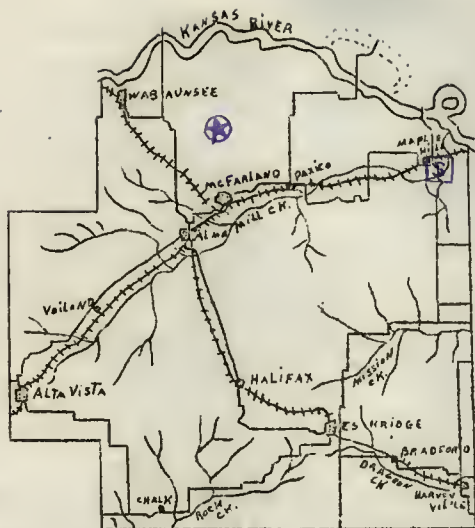
Map No. 283

Verbena lanceolata Michx.



WABAUNSEE COUNTY

Map No. 284



VERBENACEAE

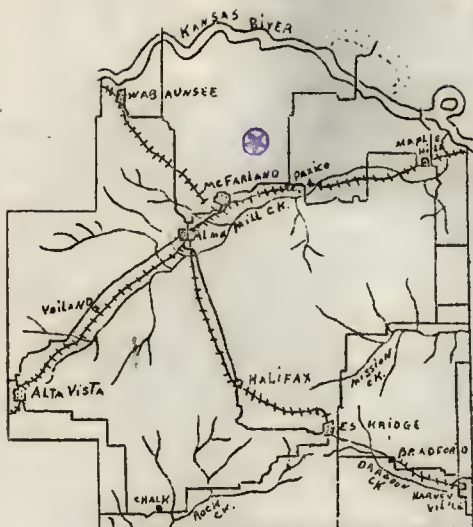
Verbena stricta Vent.

WABAUNSEE COUNTY
Map No. 285

Verbena urticifolia L.



WABAUNSEE COUNTY
Map No. 286



VERBENACEAE

Lippia cuneifolia (Torr.)

Steud.

WABAUNSEE COUNTY

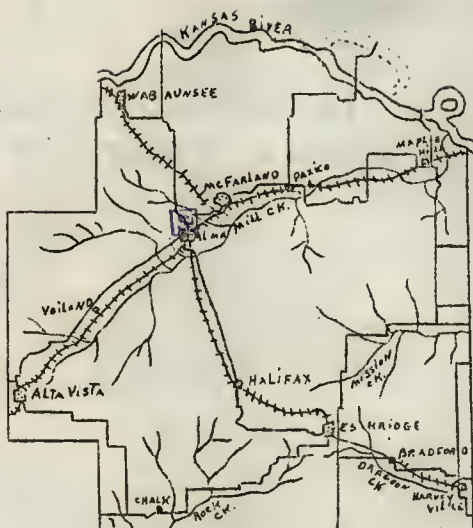
Map No. 237

Lippia lanceolata Michx.



WABAUNSEE COUNTY

Map No. 238



LABIATAE

Leonurus cardiaca L.

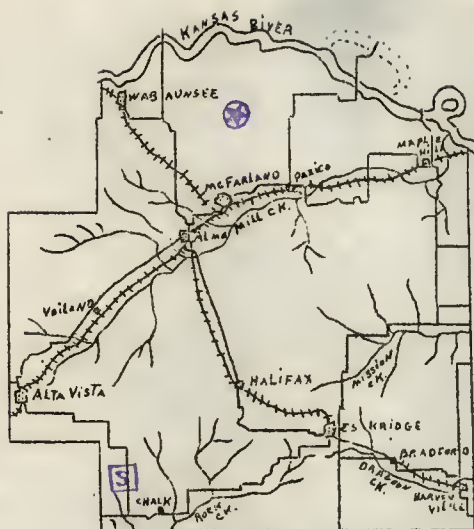
WABAUNSEE COUNTY
Map No. 289

Mentha canadensis (L.)

Briquet



WABAUNSEE COUNTY
Map No. 290



LABIATAE

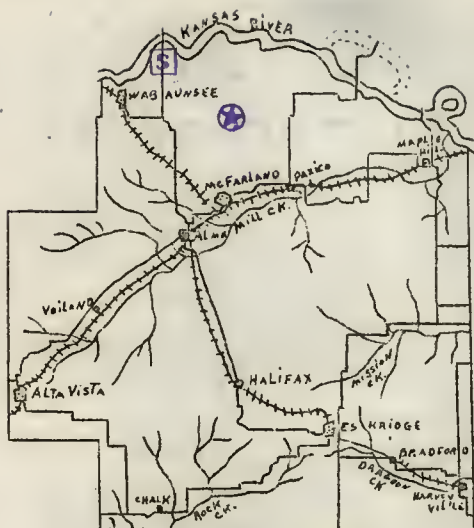
Lycopodium americanus Muhl.

WABAUNSEE COUNTY
Map No. 291

Scutellaria parvula Michx.



WABAUNSEE COUNTY
Map No. 292

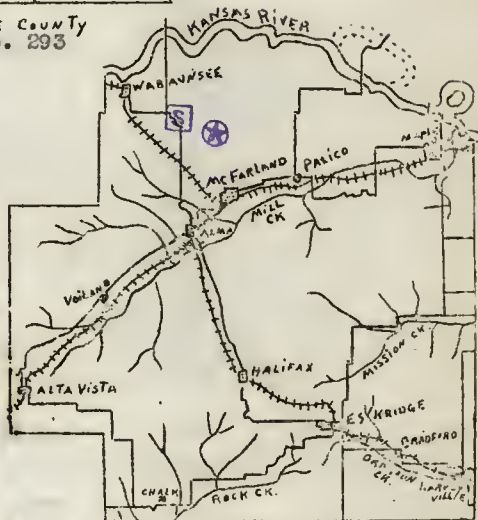


LABIATAE

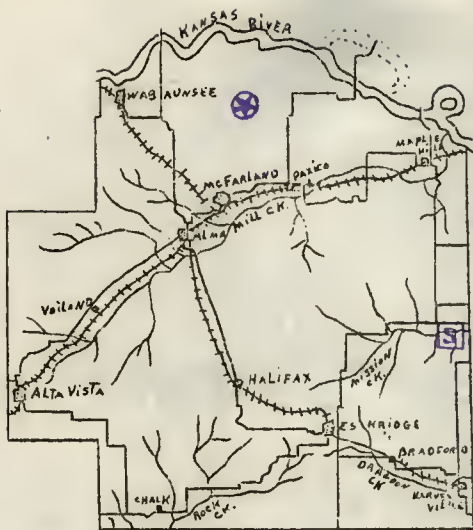
Nepeta cataria L.

WABAUUNSEE COUNTY
Map No. 293

Hedeoma hispida Pursh.



WABAUUNSEE COUNTY
Map No. 294



LABIATAE

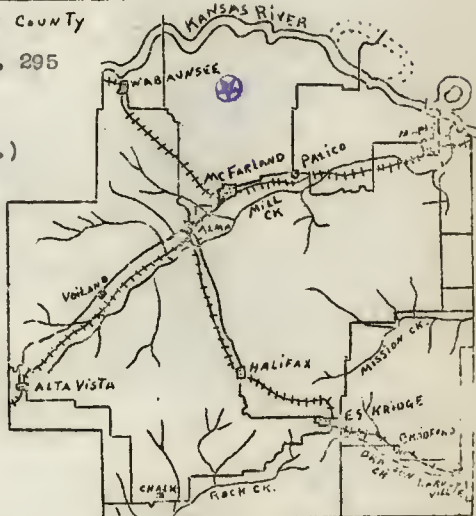
Monarda fistulosa L.

WABAUNSEE COUNTY

Map No. 295

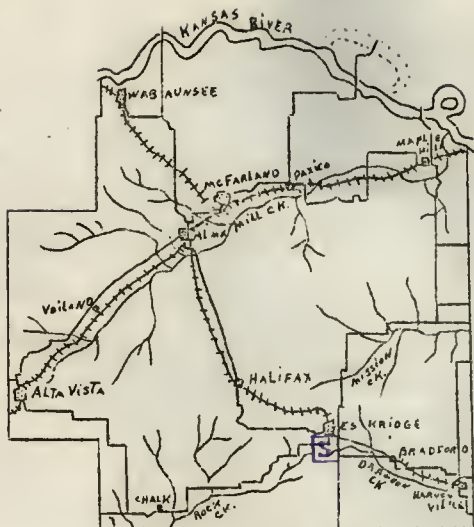
Agastache nepetoides (L.)

Kuntze



WABAUNSEE COUNTY

Map No. 296



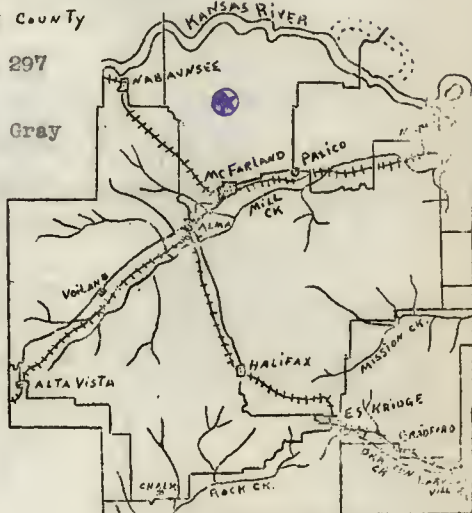
LABIATAE

Teucrium canadense L.

WABAUNSEE COUNTY

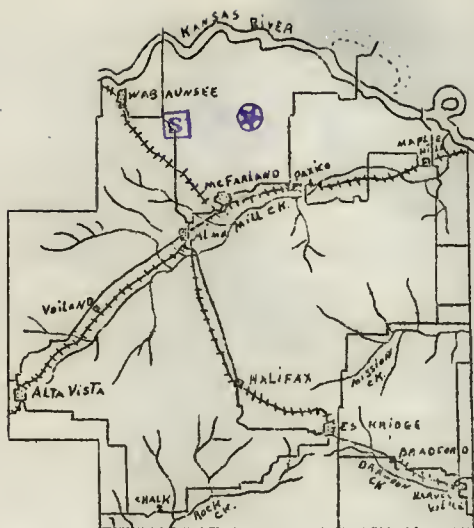
Map No. 297

Teucrium occidentale A. Gray



WABAUNSEE COUNTY

Map No. 298



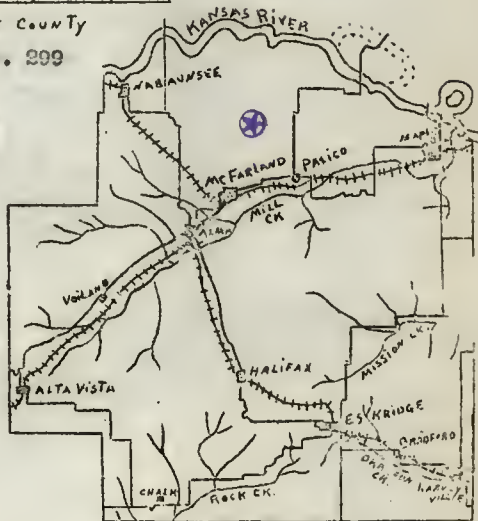
LABIATAE

Salvia lanceifolia Poir.

WABAUNSEE COUNTY

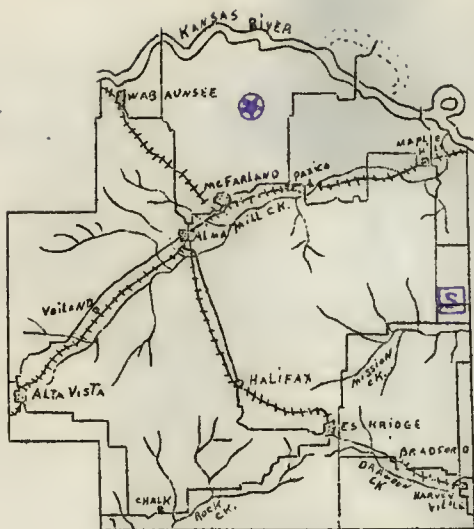
Map No. 299

Salvia pitcheri Torr.



WABAUNSEE COUNTY

Map No. 300

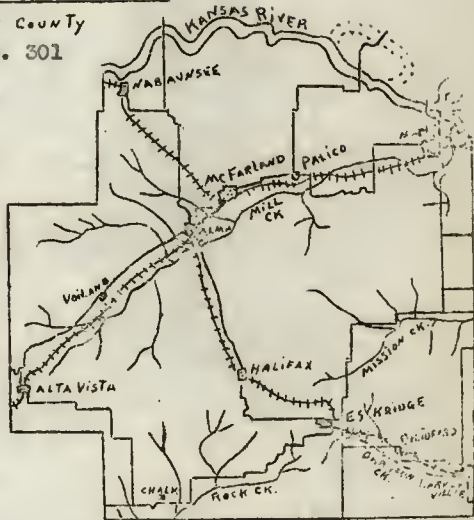


LABIATAE

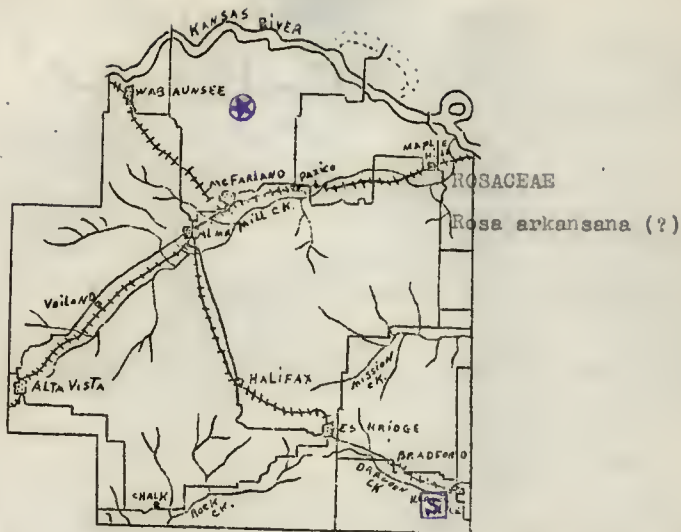
Prunella vulgaris L.

WABAUNSEE COUNTY

Map No. 301



WABAUNSEE COUNTY



WABAUNSEE COUNTY

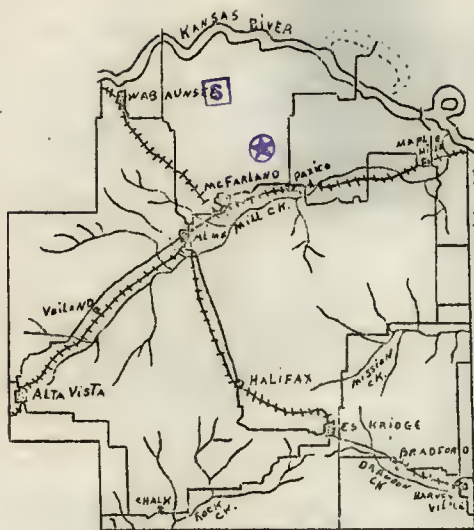
Map No. 302

Rosa woodsii Lindl.



WABAUNSEE COUNTY

Map No. 303

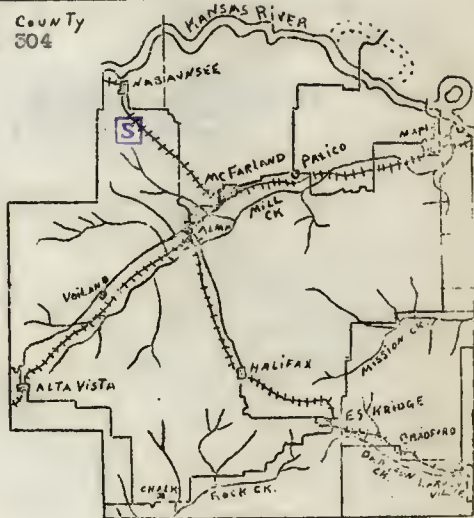


ROSACEAE

Rosa pratincola Greene

WABAUNSEE COUNTY
Map No. 304

Rosa blanda Ait.



WABAUNSEE COUNTY
Map No. 305

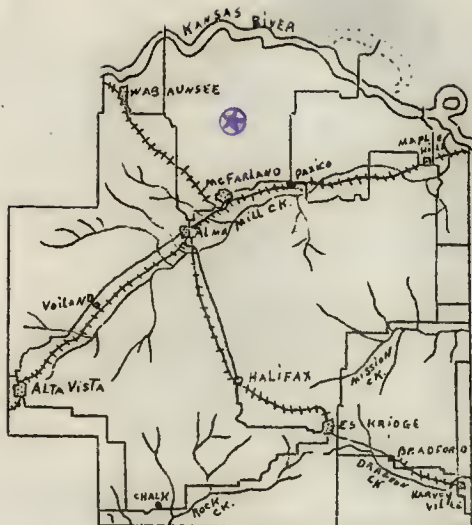


WABAUNSEE COUNTY
Map No. 306

Spirea vanhouttei Zabel.

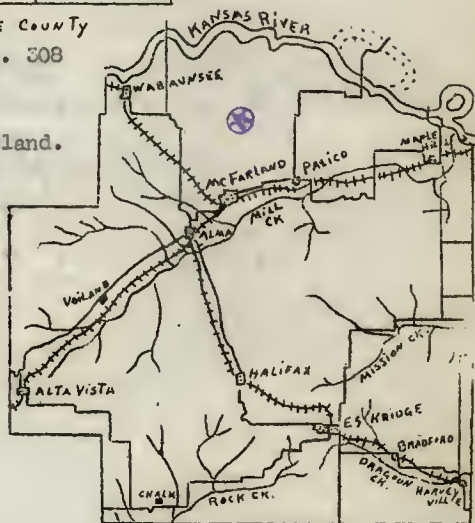


WABAUNSEE COUNTY
Map No. 307



WABAUNSEE COUNTY
Map No. 308

Agrimonia parviflora Soland.

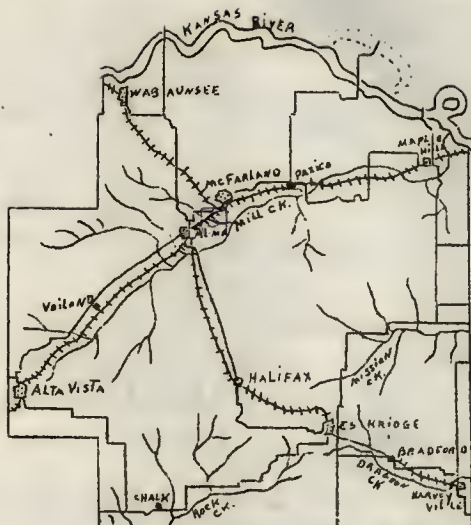


WABAUNSEE COUNTY
Map No. 309

ROSACEAE

Agrimonia mollis

(T. & G.) Britton



ROSACEAE.

Fragaria virginiana

Duchesne

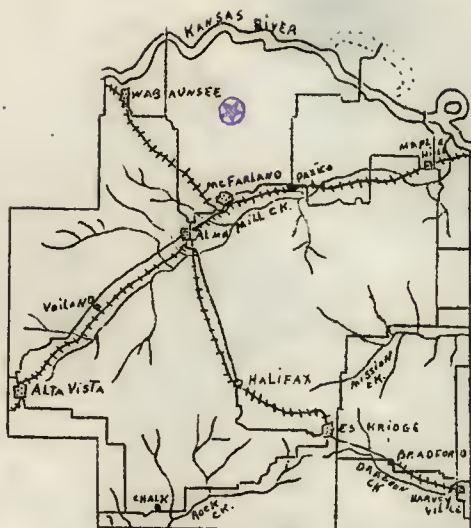
WABAUNSEE COUNTY
Map No. 310

MALACEAE

Crataegus



WABAUNSEE COUNTY
Map No. 311



ROSACEAE

Rubus canadensis L.

WABAUNSEE COUNTY

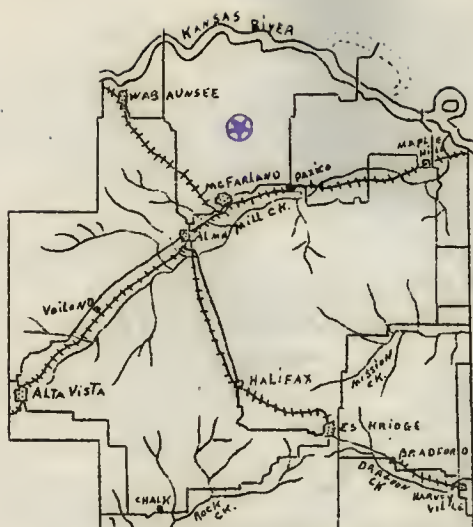
Map No. 312

Rubus occidentalis L.



WABAUNSEE COUNTY

Map No. 313



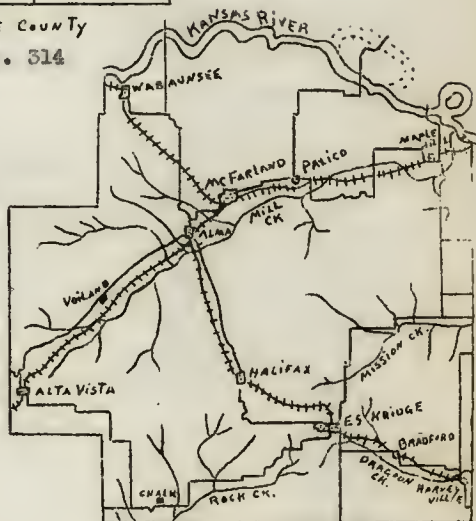
ROSACEAE

Rubus Baileyannus

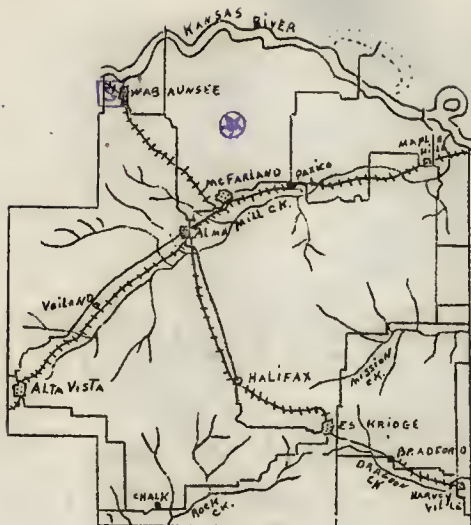
Britton

WABAUNSEE COUNTY

Map No. 314



WABAUNSEE COUNTY



PRUNACEAE

Prunus virginiana (L.)

Mill.

WABAUNSEE COUNTY

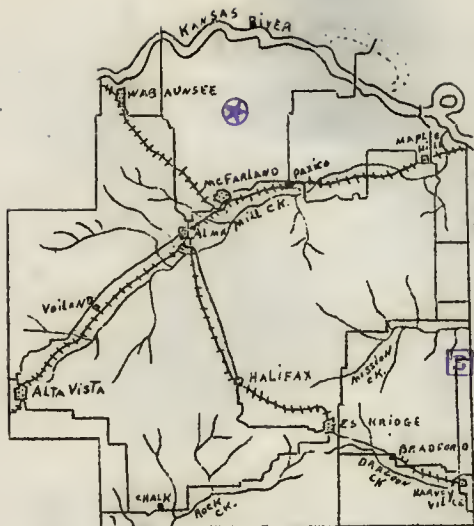
Map No. 315

Prunus americana Marsh.



WABAUNSEE COUNTY

Map No. 316



MIMOSACEAE

Morongia uncinata Willd.

WABAUNSEE COUNTY

Map No. 317

CASSIACEAE

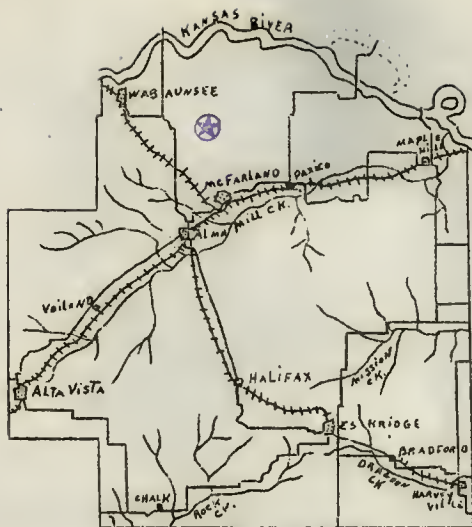
Chamaecrista fasciculata

(Michx.) Greene



WABAUNSEE COUNTY

Map No. 318



MIMOSACEAE

Aouan illinoensis

(Michx.) Kuntze

WABAUNSEE COUNTY

Map No. 319

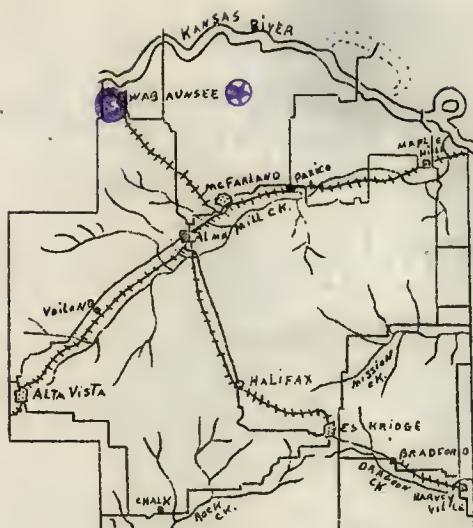
FABACEAE

Glycyrrhiza lepidota Pursh.



WABAUNSEE COUNTY

Map No. 320



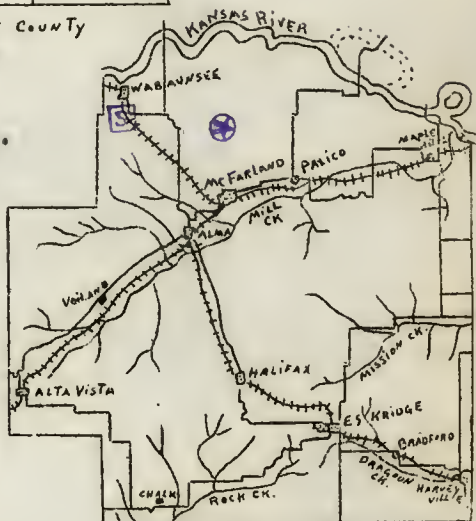
CASSIACEAE

Gymnocladus dioica

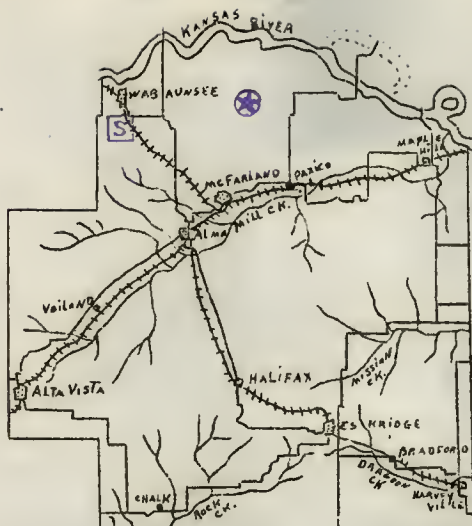
(L.) Koch.

WABAUNSEE COUNTY
Map No.

Gleditsia triacanthos L.



WABAUNSEE COUNTY
Map No. 322



LEGUMINOSAE

Robinia pseudacacia L.

WABAUNSEE COUNTY

Map No. 323

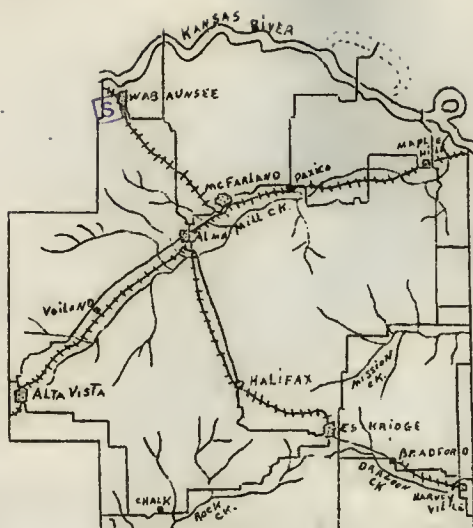
CASSIACEAE

Cercis canadensis L.



WABAUNSEE COUNTY

Map No. 324



LEGUMINOSAE

Geoprummon plattense

(Nutt.) Rydb.

WABAUNSEE COUNTY

Map No. 325

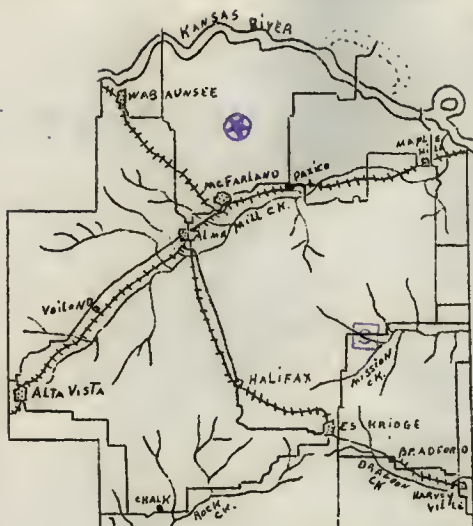
Geoprummon crassicaarpus

(Nutt.) Rydb.



WABAUNSEE COUNTY

Map No. 326



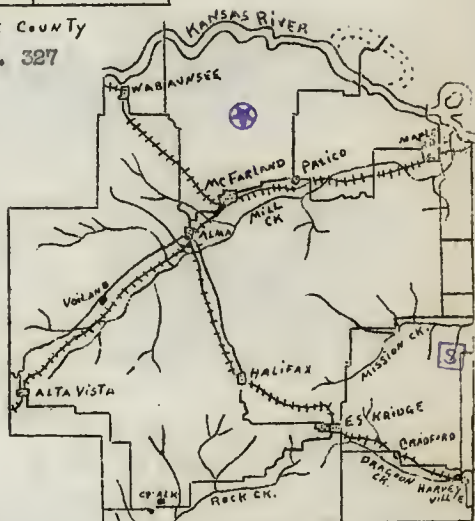
LEGUMINOSAE

Melilotus officinalis

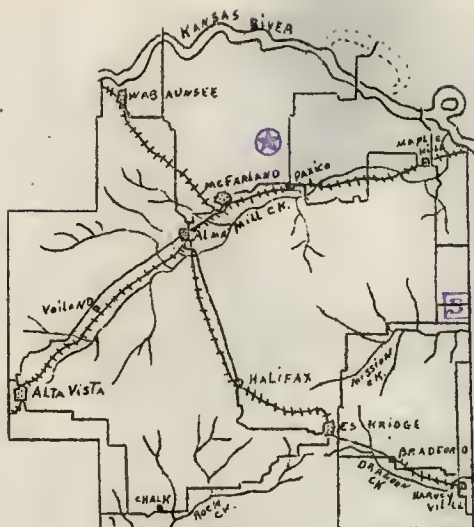
(L.) Lam.

WABAUNSEE COUNTY
Map No. 327

Melilotus alba Desv.



WABAUNSEE COUNTY
Map No. 328



LEGUMINOSAE

Petalostemum purpureum
(Vent.) Rydb.

WABAUNSEE COUNTY

Map No. 329

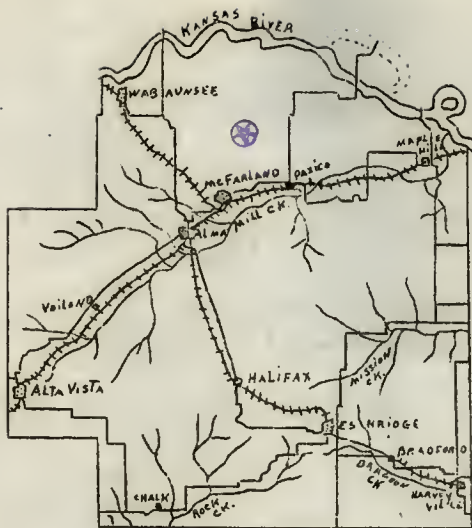
Petalostemum candidum (Willd.)

Michx.



WABAUNSEE COUNTY

Map No. 330

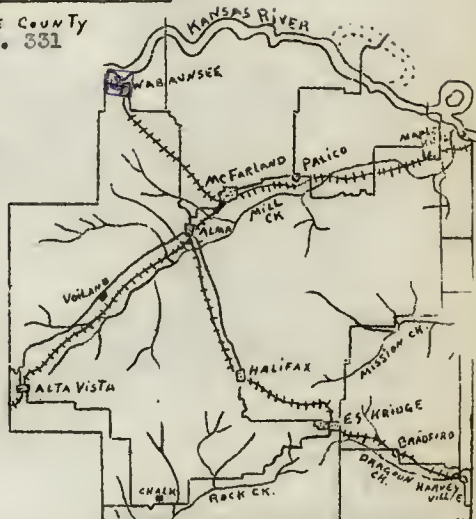


WABAUNSEE COUNTY
Map No. 331

LEGUMINOSAE

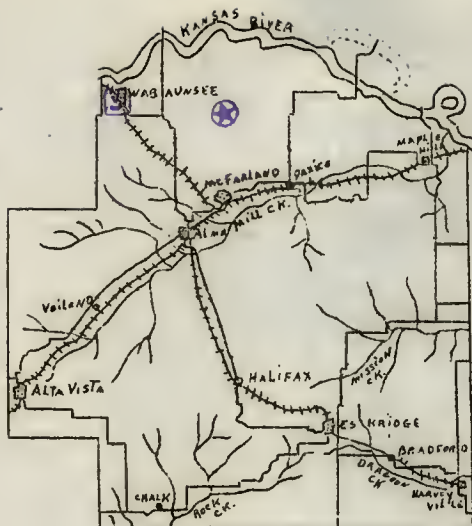
*Petalostemum multi-
florum* Nutt.

Vicia sparsifolia Nutt.



WABAUNSEE COUNTY

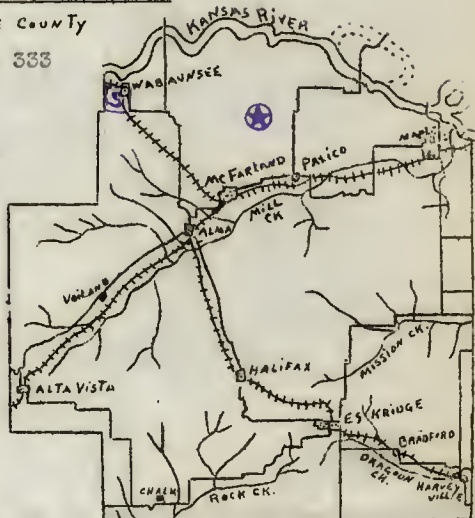
Map No. 332



WABAUNSEE COUNTY

Map No. 333

Baptisia bracteata Ell.



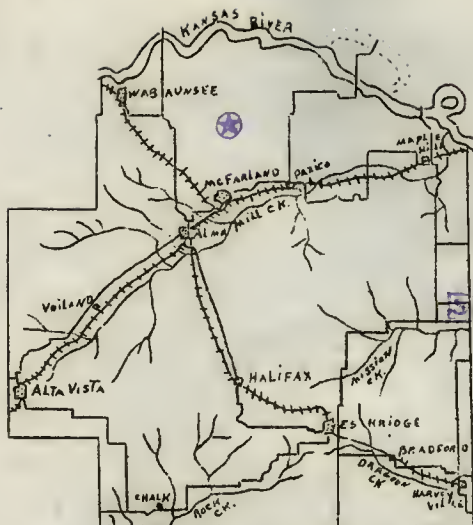
WABAUNSEE COUNTY

Map No. 334

LEGUMINOSAE

Baptisia australis

(L.) R. Br.



LEGUMINOSAE

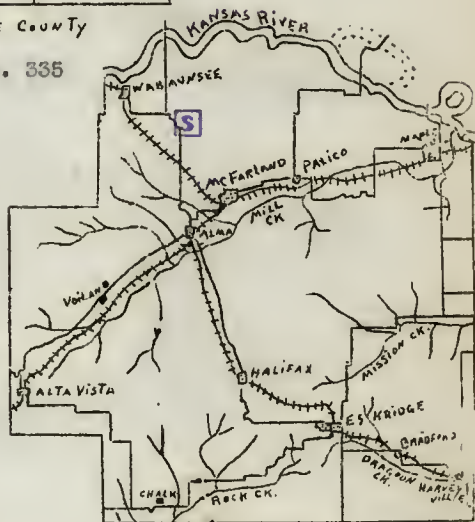
Baptisia leucantha T.

& G.

WABAUNSEE COUNTY

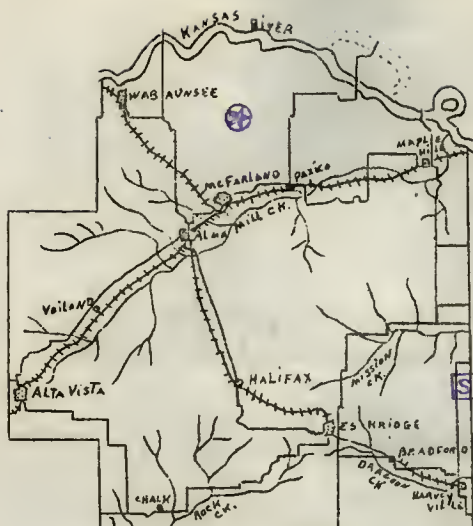
Map No. 335

Amorpha nana Nutt.



WABAUNSEE COUNTY

Map No. 336

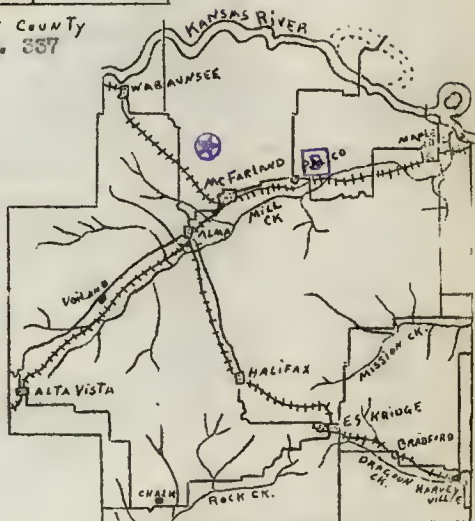


FABACEAE

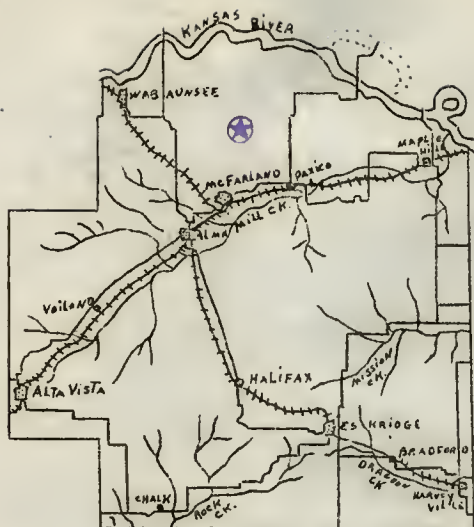
Amorpha canescens Pursh.

WABAUNSEE COUNTY
Map No. 337

Amorpha fruticosa L.



WABAUNSEE COUNTY
Map No. 338



FABACEAE

Melbomia grandiflora

(Walt.) Kuntze

WABAUNSEE COUNTY

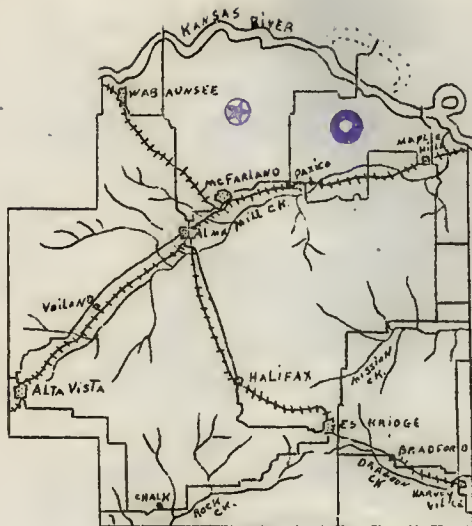
Map No. 339

Melbomia canescens (L.) Kuntze



WABAUNSEE COUNTY

Map No. 340



FABACEAE

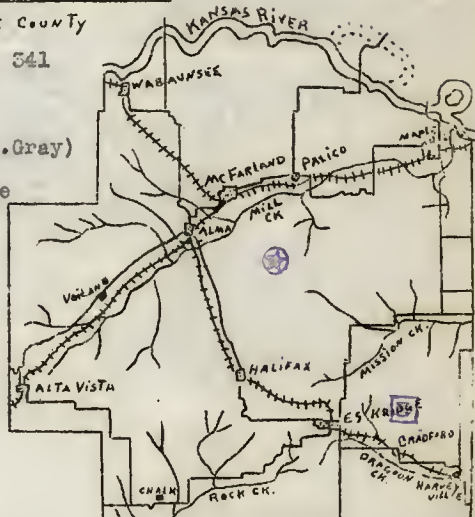
Medicago sativa L.

WABAUNSEE COUNTY

Map No. 341

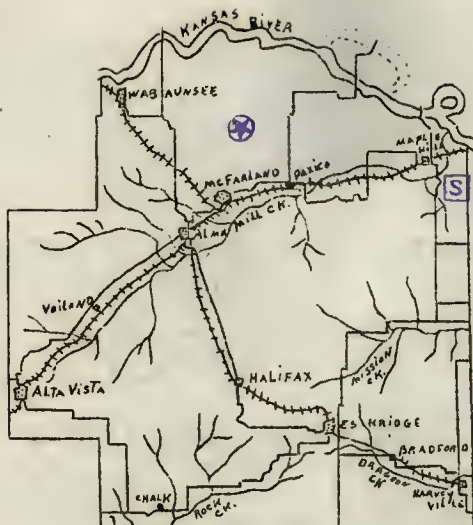
Meibomia illinoensis (A.Gray)

Kuntze



WABAUNSEE COUNTY

Map No. 342



FABACEAE

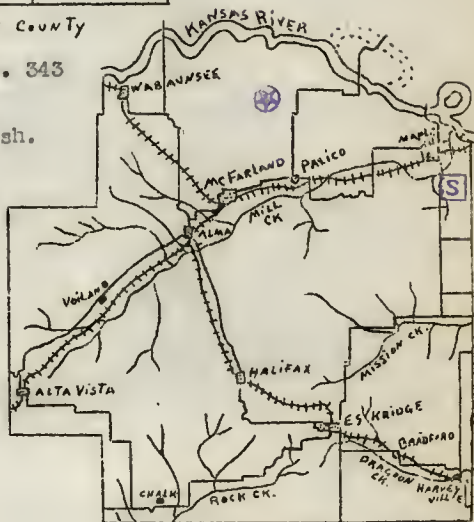
Psoralea floribunda

Nutt.

WABAUNSEE COUNTY

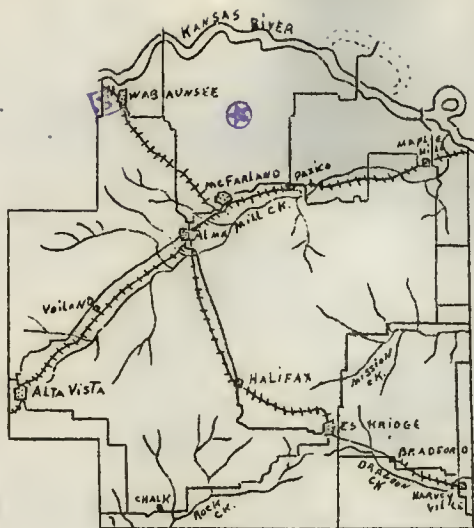
Map No. 343

Psoralea agrophylla Pursh.



WABAUNSEE COUNTY

Map No. 344



WABAUNSEE COUNTY

Map No. 345

FABACEAE

Psoralea esculenta

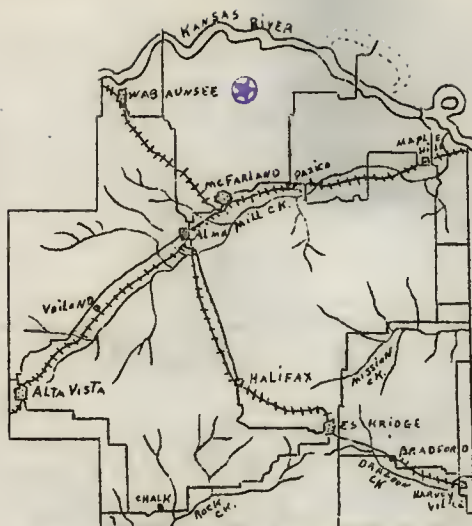
Pursh.

Falcata pitcheri (T & G) Kuntze



WABAUNSEE COUNTY

Map No. 346



FABACEAE

Astragalus canadensis

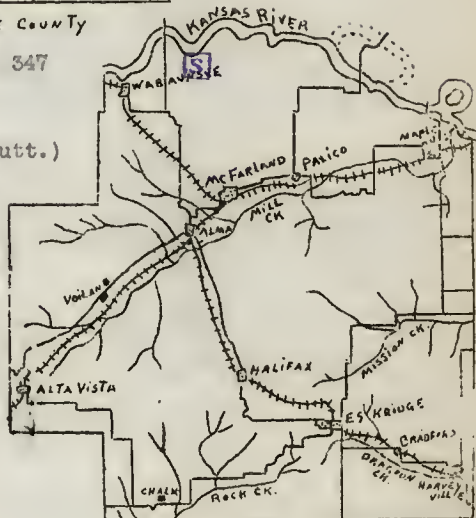
L.

WABAUNSEE COUNTY

Map No. 347

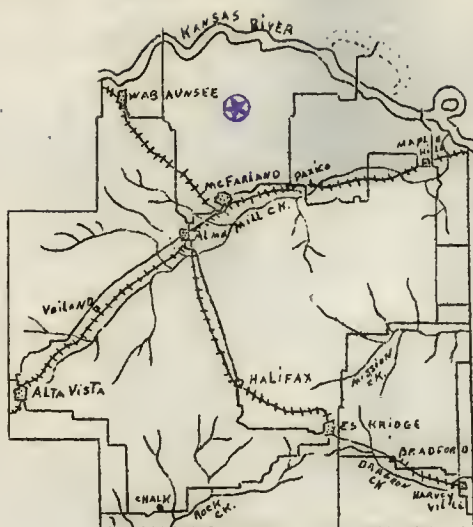
Glycyrrhiza lepidota (Nutt.)

Pursh.



WABAUNSEE COUNTY

Map No. 348



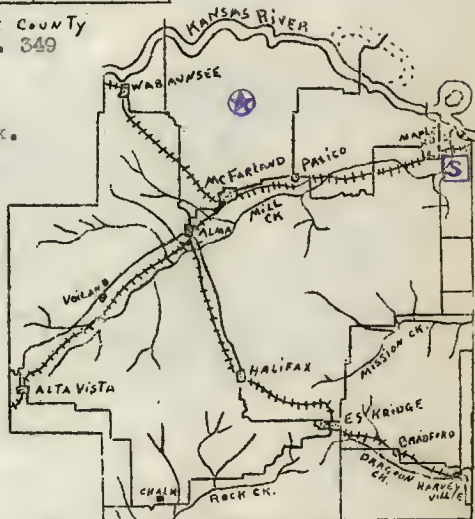
FABACEAE

Lespedeza violacea

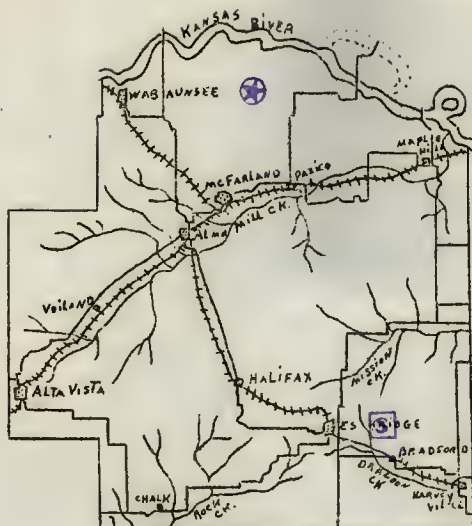
(L.) Pers.

WABAUNSEE COUNTY
Map No. 349

Lespedeza capitata Michx.



WABAUNSEE COUNTY
Map No. 350



FABACEAE.

Trifolium pratense L.

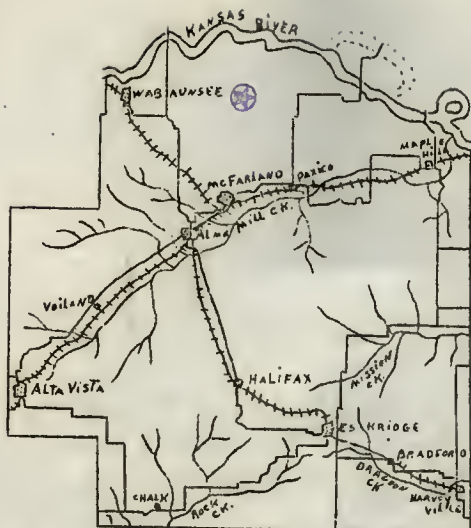
WABAUNSEE COUNTY
Map No. 351

Trifolium repens L.



WABAUNSEE COUNTY

Map No. 352



LEGUMINOSAE

Parosola dalea (L.)

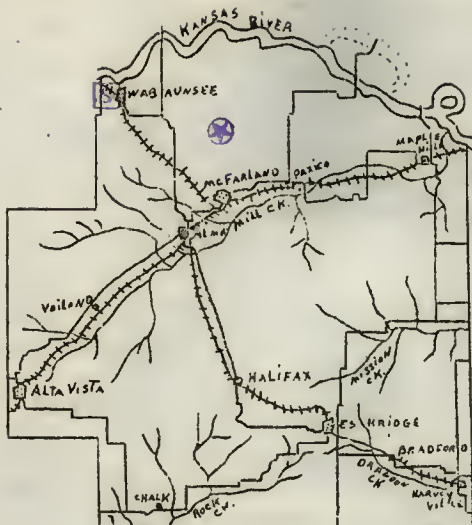
Britton

WABAUNSEE COUNTY
Map No. 353

Strophostyles pauciflora
(Benth.) Wats.



WABAUNSEE COUNTY
Map No. 354

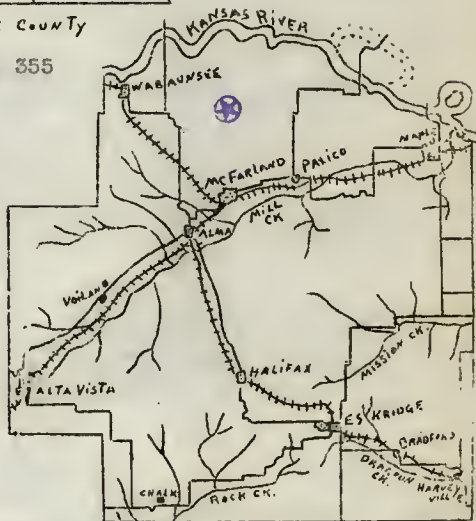


WABAUNSEE COUNTY

Map No. 355

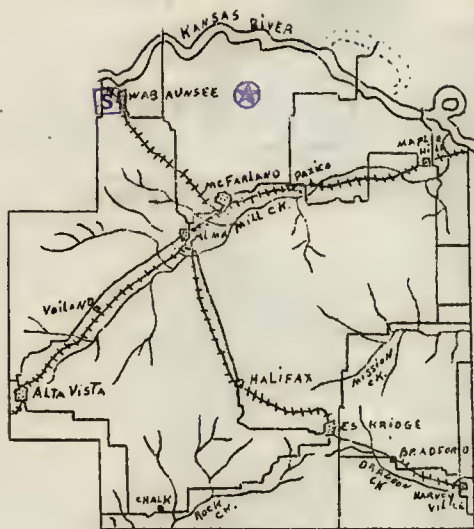
CRASSULACEAE

Penthorum sedoides L.



WABAUNSEE COUNTY

Map No. 356



PLATANACEAE

Plantanus occidentalis

L.

WABUNSEE COUNTY

Map No. 357

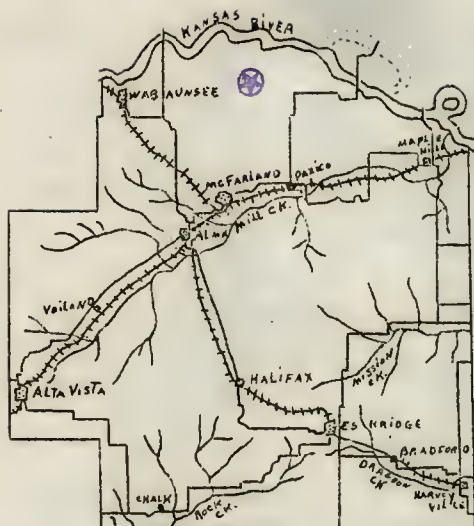
LYTHRACEAE

Lythrum alatum Pursh.



WABUNSEE COUNTY

Map No. 358



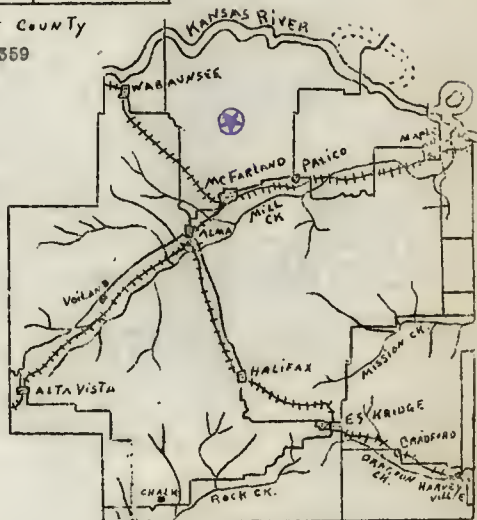
OENOTHERACEAE

Meriolix serrulata (Nutt.)

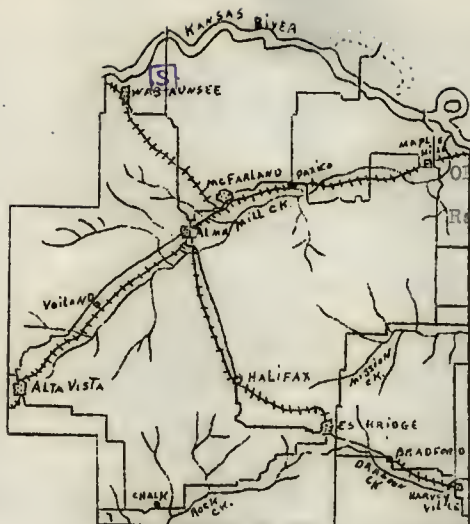
Walp.

WABUNSEE COUNTY
Map No. 359

Oenothera biennis L.



WABUNSEE COUNTY
Map No. 360



WABAUNSEE COUNTY

Map No. 361

Hartmannia speciosa (Nutt.)

Small



WABAUNSEE COUNTY

Map No. 362

OTINOTHERACEAE

Hartmannia laciniata (Hill)

Rose



WABAUNSEE COUNTY

Map No. 363

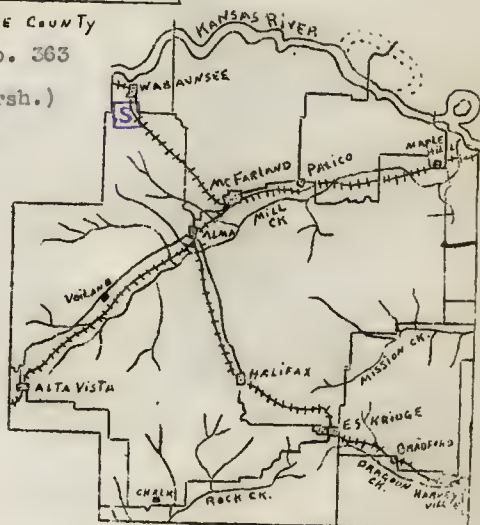
Anogra albicaulis (Pursh.)

Britton

OENOTHERACEAE

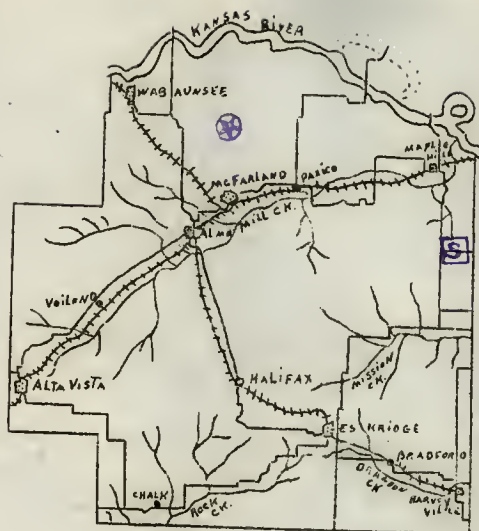
Stenosiphon linifolium (Nutt.)

Britton



WABAUNSEE COUNTY

Map No. 364.



OT NOTILRAGEAE

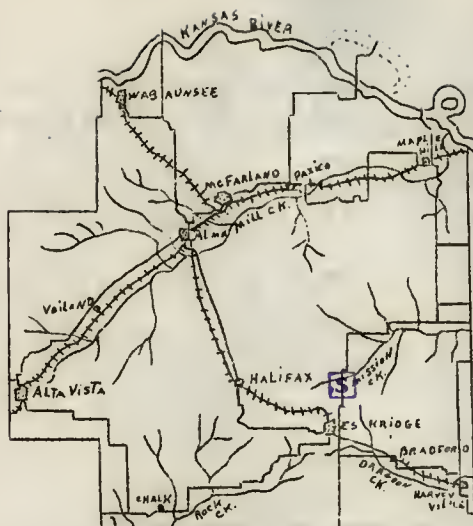
Gaura biennis L.

WABAUNSEE COUNTY
Map No. 365

Gaura parviflora Dougl.



WABAUNSEE COUNTY
Map No. 366



WABAUNSEE COUNTY

Map No. 367

Oenothera serrulata Nutt.

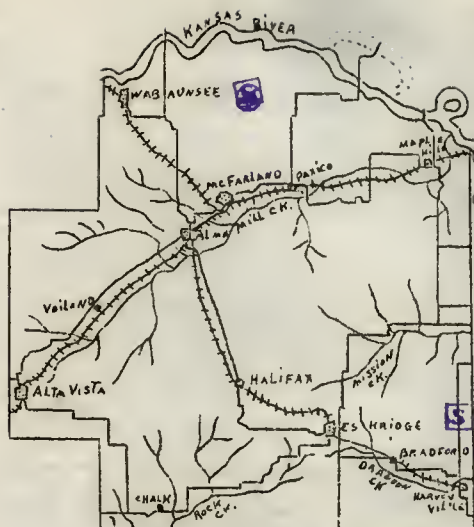


WABAUNSEE COUNTY

Map No. 368

OENOTHERACEAE

Megapterium missouri-
ensis Sims.



CACTACEAE

Opuntia humifusa

Tourn.

WABAUNSEE COUNTY

Map No. 369

Coryphantha missouriensis

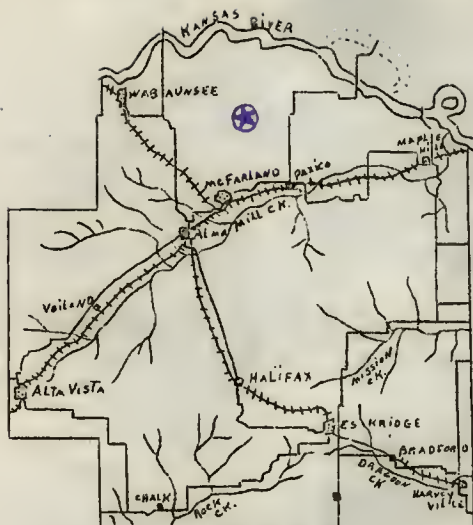
(Sweet) Britton &

Rose



WABAUNSEE COUNTY

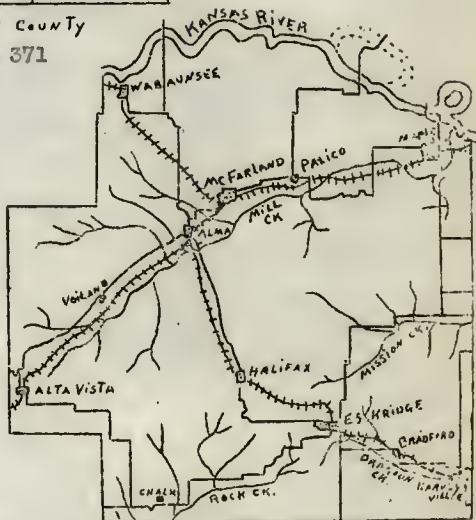
Map No. 370



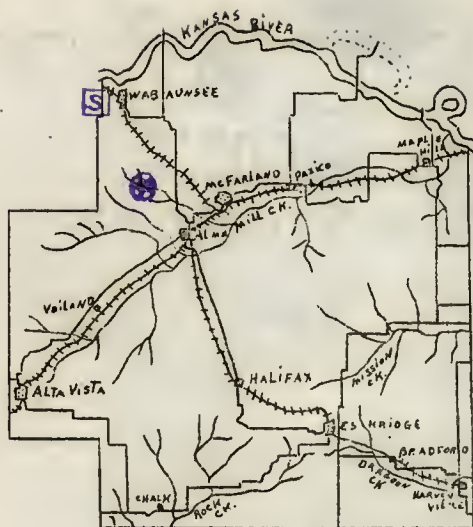
LOASACEAE

Mentzolia oligosperma Nutt.

WABAUNSEE COUNTY
Map No. 371



WABAUNSEE COUNTY



CUCURBITACEAE

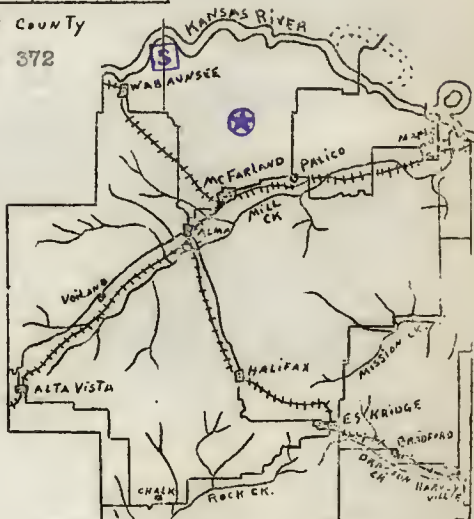
Pepo foetidissima

H.B.K. Britton

WABAUNSEE COUNTY

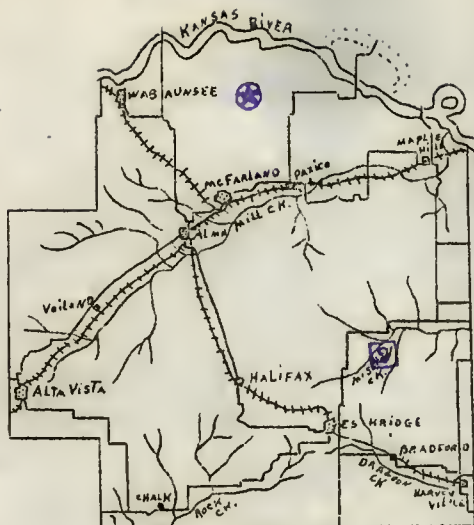
Map No. 372

Sicyos angulatus L.



WABAUNSEE COUNTY

Map No. 373



RHAIWACEAE

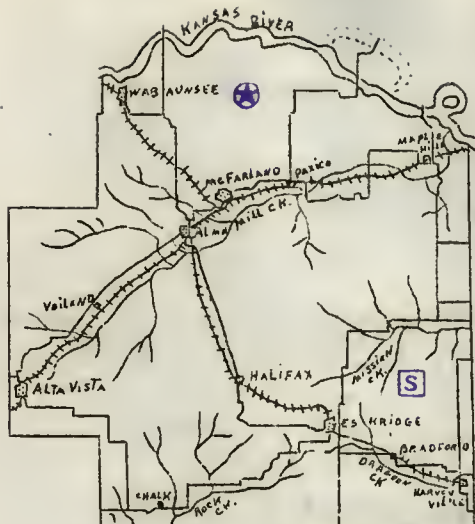
Ceanothus ovatus
var. *pubes-*
cens T. & G.; S.
Wats.

WABAUNSEE COUNTY
Map No. 376

Ceanothus americanus L.



WABAUNSEE COUNTY
Map No. 377



RHAMNACEAE

Rhamnus lanceolata

Pursh.

WABAUNSEE COUNTY

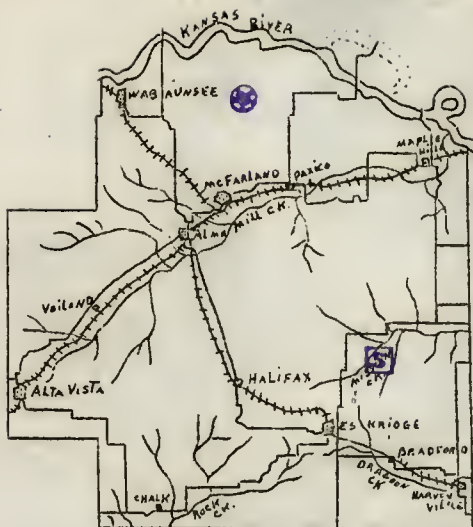
Map No. 374

Ceanothus ovatus Desf.



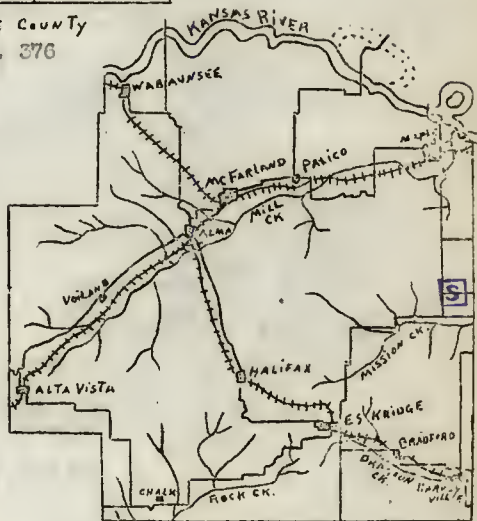
WABAUNSEE COUNTY

Map No. 375



WABAUNSEE COUNTY
Map No. 376

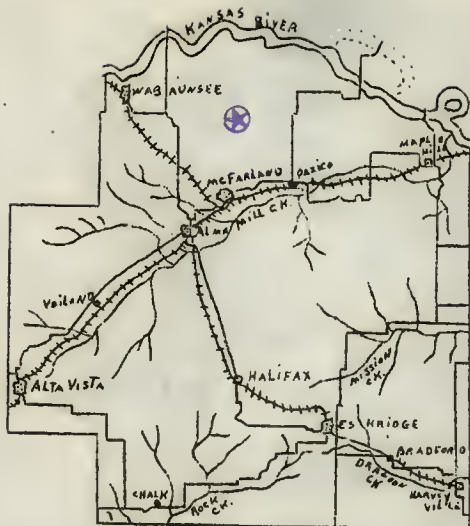
Ceanothus americanus L.



WABAUNSEE COUNTY
Map No. 377

RHAMNACEAE

Ceanothus ovatus
var. *pubescens* T. & G.; S.
Wats.



VITAGRAE

Vitis cinerea Engelm.

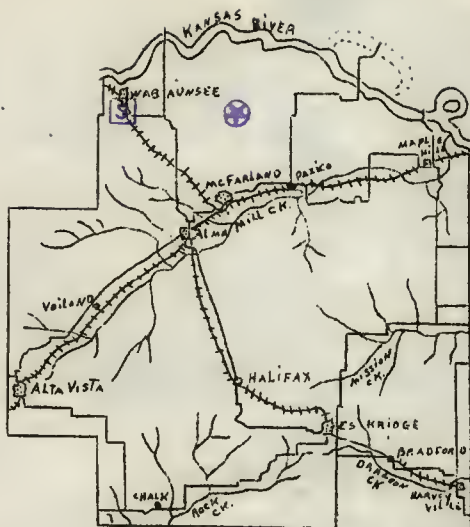
WABAUNSEE COUNTY
Map No. 578

Vitis cordifolia Michx.



WABAUNSEE COUNTY

Map No. 579



VITACEAE

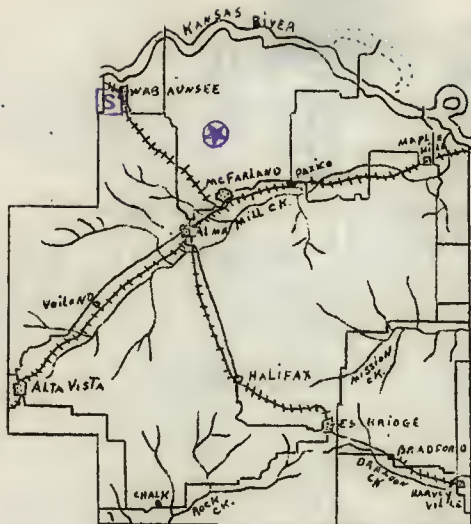
Vitis vulpina L.

WABAUNSEE COUNTY
Map No. 380

Ampelopsis cordata Michx.



WABAUNSEE COUNTY
Map No. 381



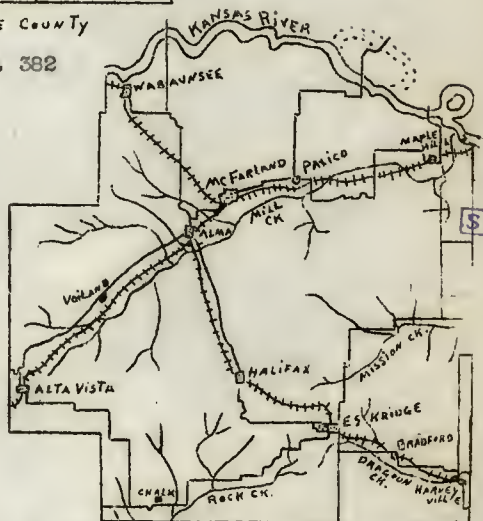
VITACEAE

Parthenocissus quinquefolia (L.) Greene

WABAUNSEE COUNTY

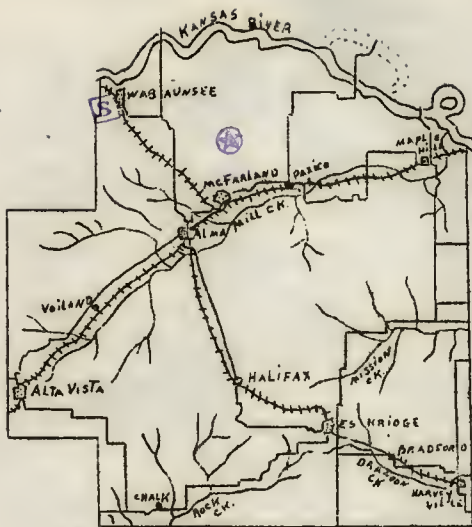
Map No. 382

Vitis palmata Vahl.



WABAUNSEE COUNTY

Map No. 383



CELASTRACEAE

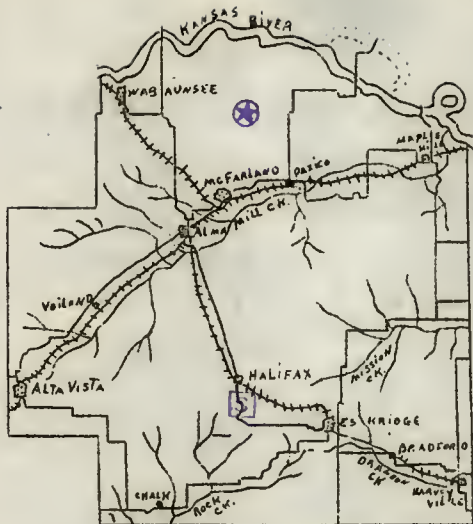
Celastrus scandens L.

WABAUNSEE COUNTY
Map No. 384

staphylea trifolia L.



WABAUNSEE COUNTY
Map No. 385

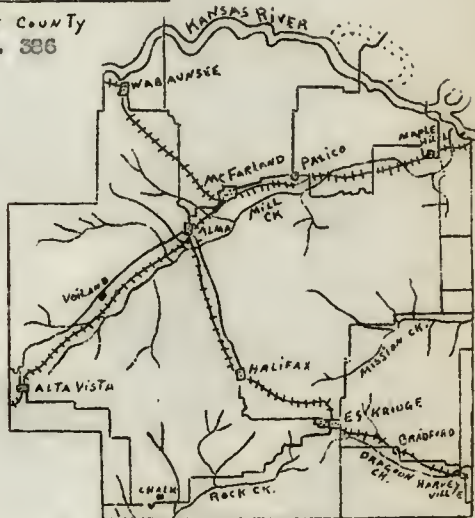


CELASTRACEAE

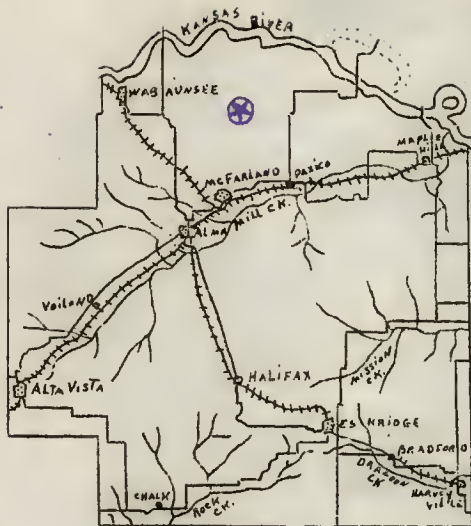
Euonymus atropurpureus

Jacq.

WABAUNSEE COUNTY
Map No. 386



WABAUNSEE COUNTY



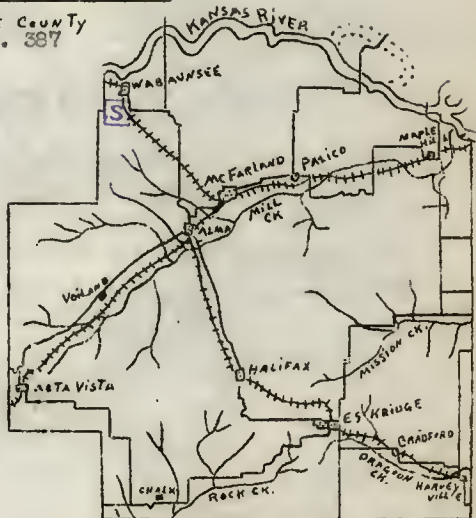
SANTALACEAE

Comandra umbellata

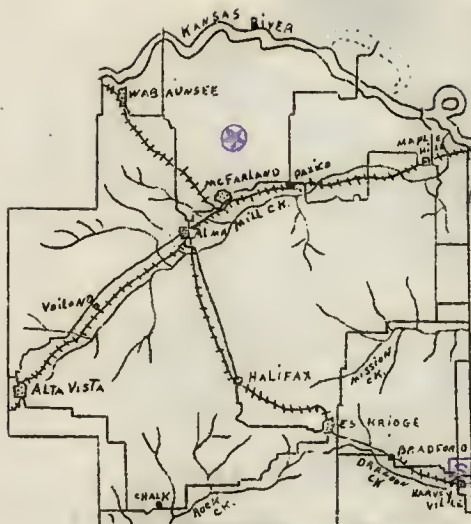
(L.) Nutt.

WABAUNSEE COUNTY
Map No. 387

Comandra pallida A. DC.



WABAUNSEE COUNTY
Map No. 388



MAPINDACEAE

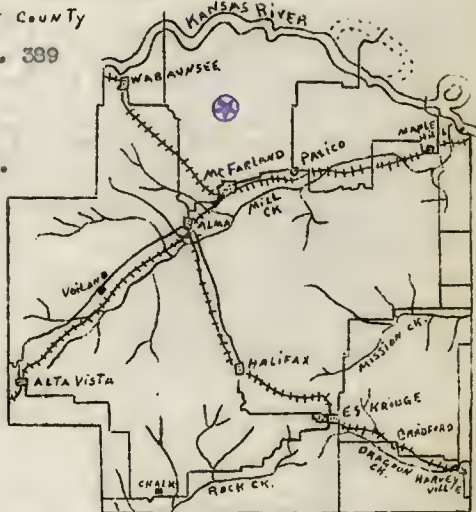
Mesculus arguta

(Buckley) Robinson

WABAUNSEE COUNTY

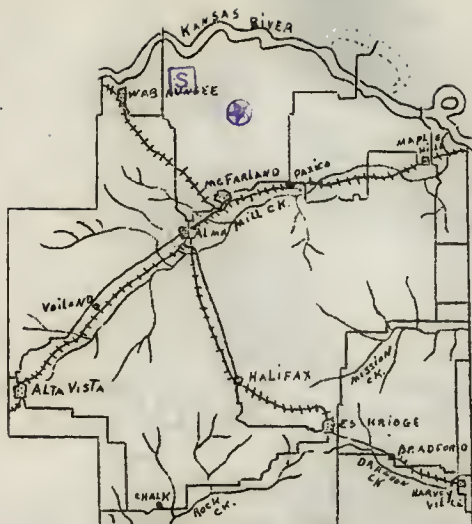
Map No. 399

Quercus prinoides Willd.



WABAUNSEE COUNTY

Map No. 390



SAPINDACEAE

Quercus macrocarpa

Michx.

WABAUNSEE COUNTY

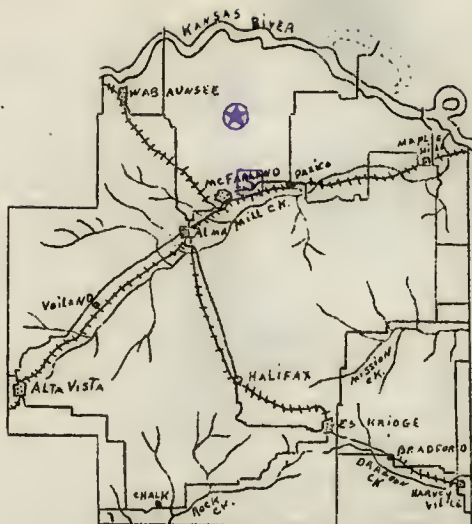
Map No. 391

Quercus muhlenbergii Engelm.



WABAUNSEE COUNTY

Map No. 392



ACERACEAE

Acer negundo L.

WABAUNSEE COUNTY

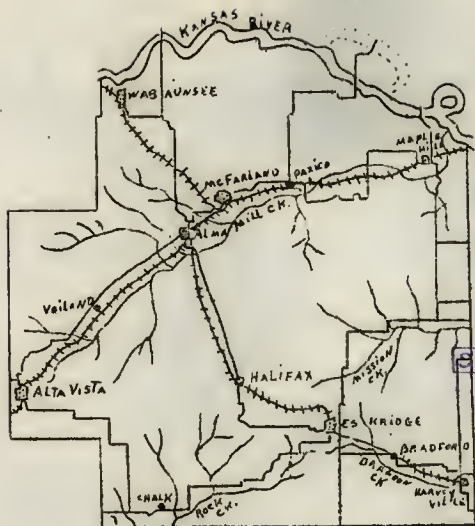
Map No. 393

Acer saccharinum L.



WABAUNSEE COUNTY

Map No. 394



ANACARDIACEAE

Rhus crenata (Mill)

Greene

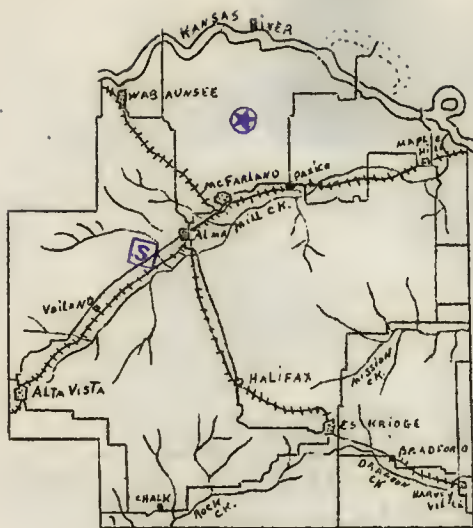
WABAUNSEE COUNTY
Map No. 395

Toxicodendron var. *radicans*

(L.) Vent.



WABAUNSEE COUNTY
Map No. 396

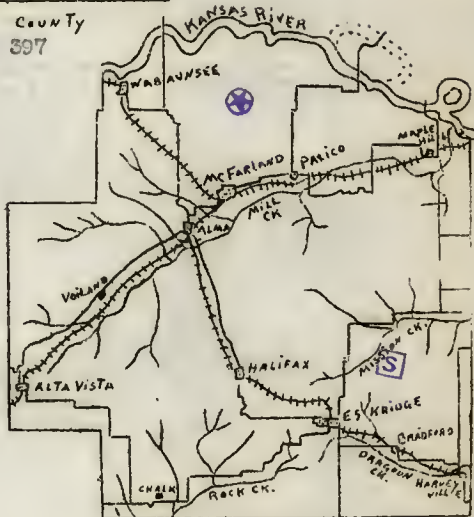


ANACARDIACEAE

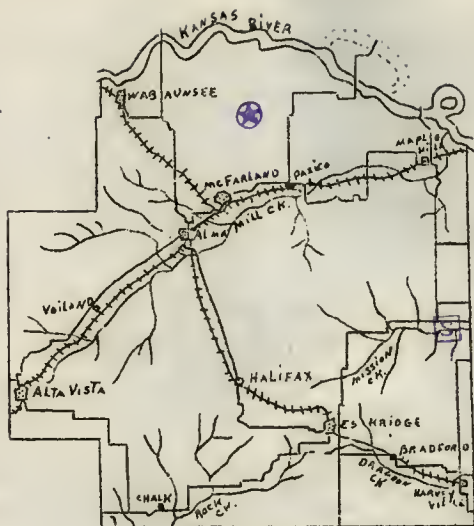
Rhus glabra L.

WABAUNSEE COUNTY
Map No. 397

Rhus trilobata Nutt.



WABAUNSEE COUNTY
Map No. 398



FUMARIACEAE

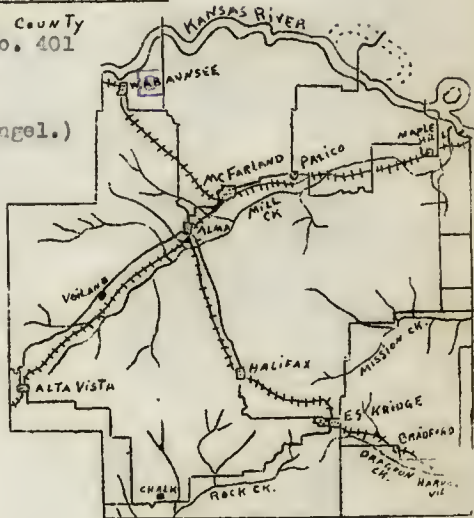
Bicuculla cucullaria

(L.) Millsp.

WABUNSEE COUNTY
Map No. 401

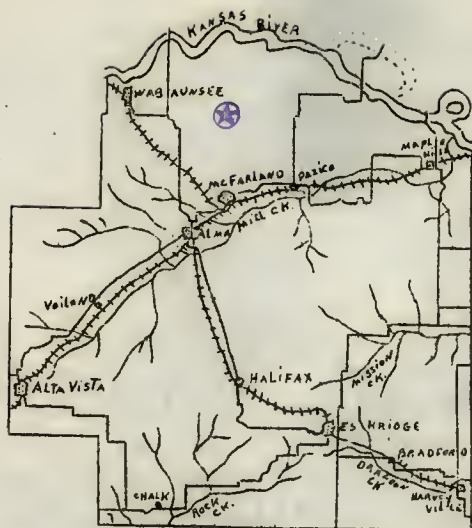
Capnoides micranthum (Engel.)

Britton



WABUNSEE COUNTY

Map No. 402

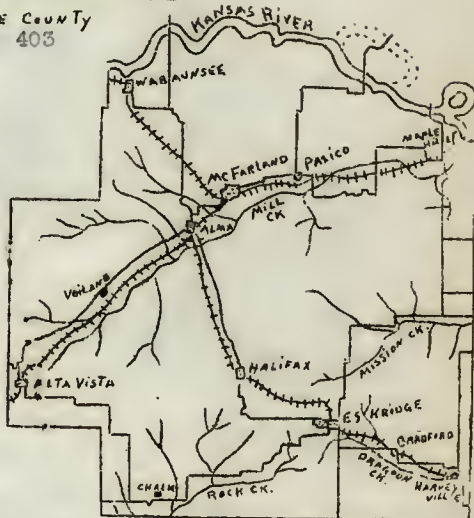


FUMARIACEAE

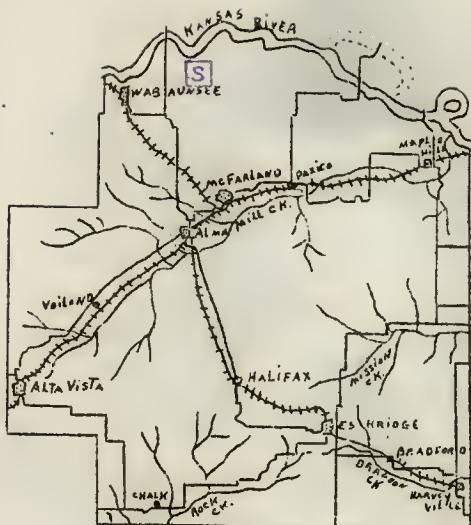
Capnoides aureum (Willd.)

Kuntze

WABAUNSEE COUNTY
Map No. 403



WABAUNSEE COUNTY



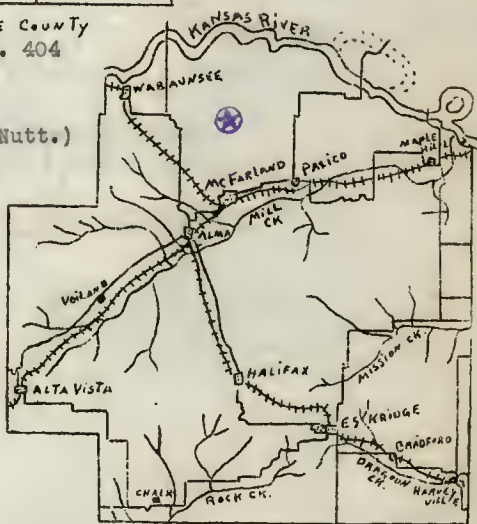
WABAUNSEE COUNTY
Map No. 404

APIACEAE

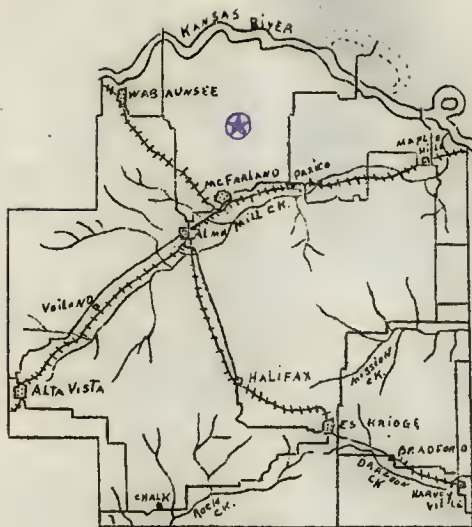
Cogswellia foeniculacea
(Nutt.) Coult. & Rose

Cogswellia daucifolia (Nutt.)

M.E. Jones



WABAUNSEE COUNTY
Map No. 405



APIACEAE

Spermolepsis patens

(Nutt.) Robinson

WABAUNSEE COUNTY

Map No. 406

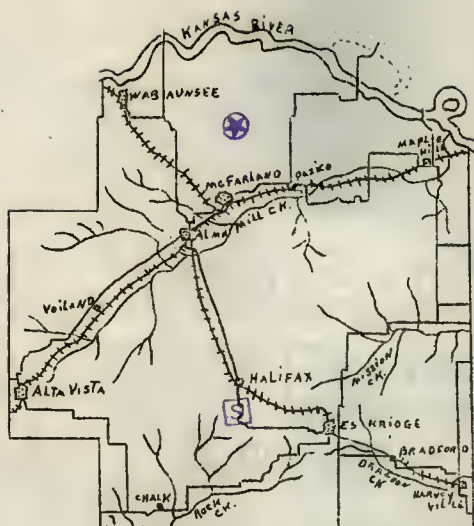
Washingtonia longistylis

(Torr.) Britton



WABAUNSEE COUNTY

Map No. 407



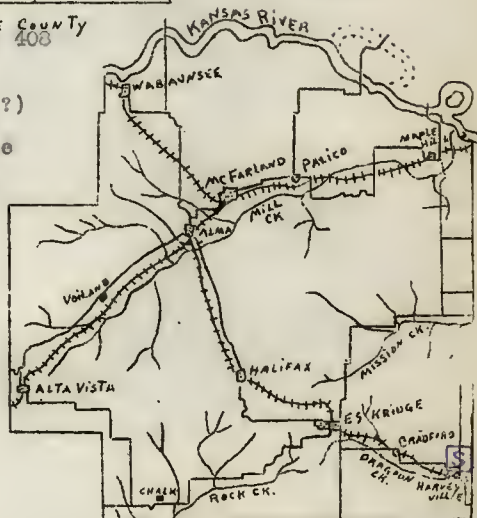
APIACEAE

Sanicula marylandica L.

WABAUNSEE COUNTY
Map No. 408

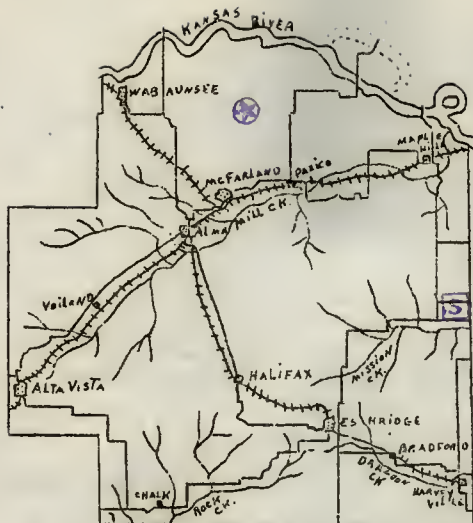
Chaerophyllum texanum (?)

Coult. & Rose



WABAUNSEE COUNTY

Map No. 409

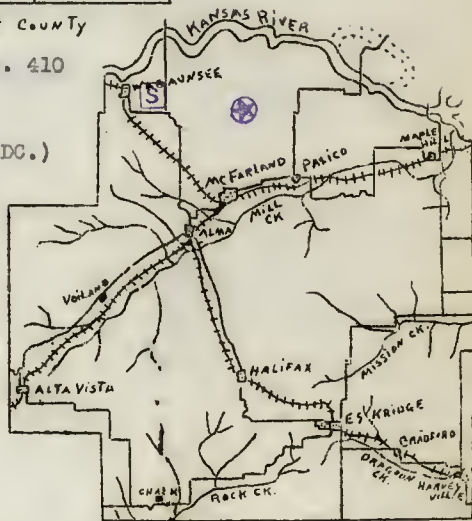


WABAUNSEE COUNTY

Map No. 410

Pleiotaenia nuttallii (DC.)

Coult. & Rose

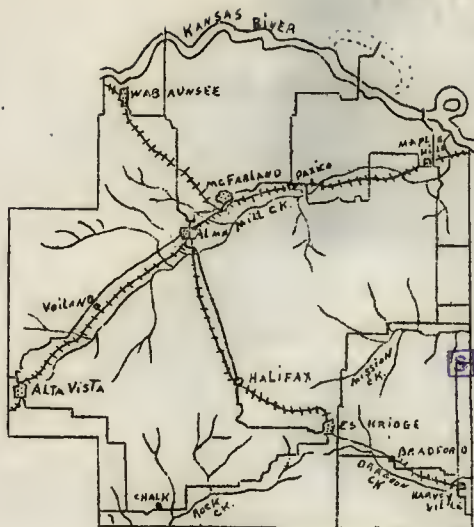


WABAUNSEE COUNTY

Map No. 411

APIACEAE

Cicuta maculata L.



APIACEAE

Bryngium yuccaeifolium

Michx.

WABAUNSEE COUNTY
Map No. 412

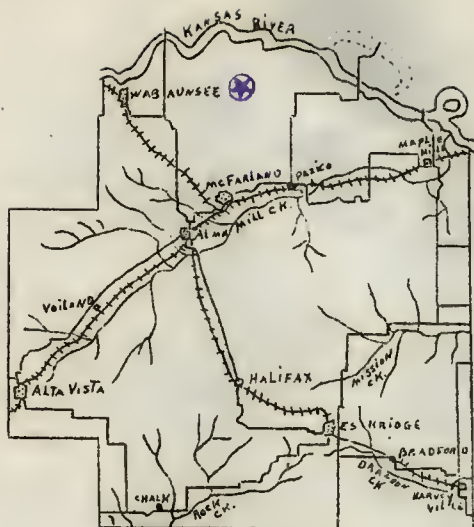
Cerofolium cerofolium (L.)

Britton



WABAUNSEE COUNTY

Map No. 413



WABAUNSEE COUNTY

Map No. 414

CORNACEAE

Cornus asperifolia Michx.



WABAUNSEE COUNTY

Map No. 415



RUBIACEAE

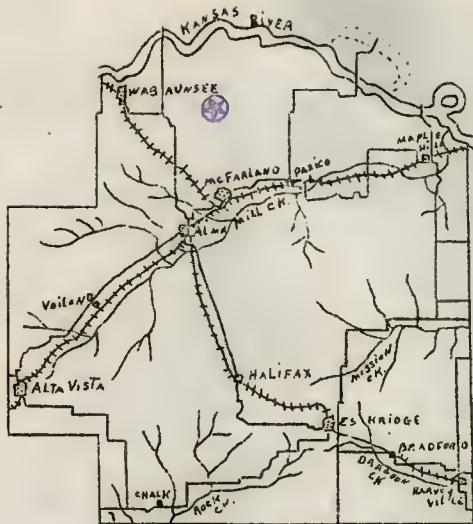
Houstonia minima Beck.

WABAUNSEE COUNTY
Map No. 416

Houstonia angustifolia Michx.



WABAUNSEE COUNTY
Map No. 417



RUBIACEAE

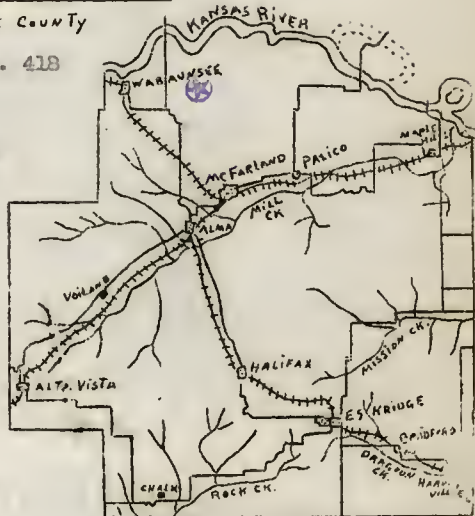
Galium concinnum Torr.

Gray

WABAUNSEE COUNTY

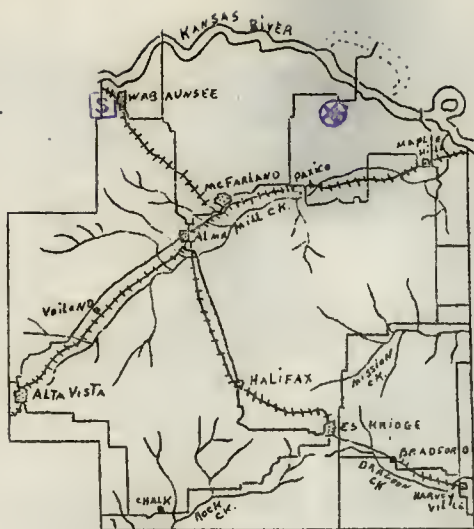
Map No. 418

Galium triflorum Michx.



WABAUNSEE COUNTY

Map No. 419



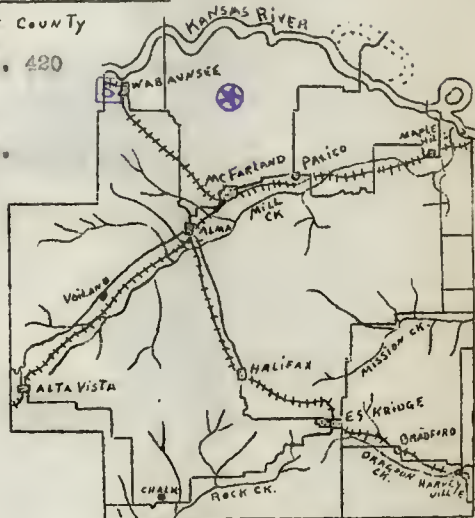
RUBIACEAE

Galium aparine L.

WABAUNSEE COUNTY

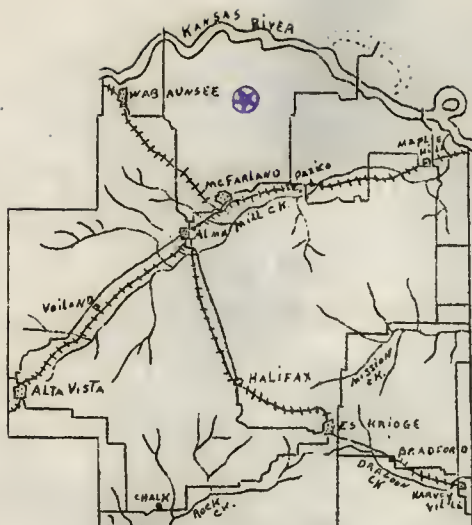
Map No. 420

Galium circaeazans Michx.



WABAUNSEE COUNTY

Map No. 421



RUBIACEAE

Cophalanthus occidentalis

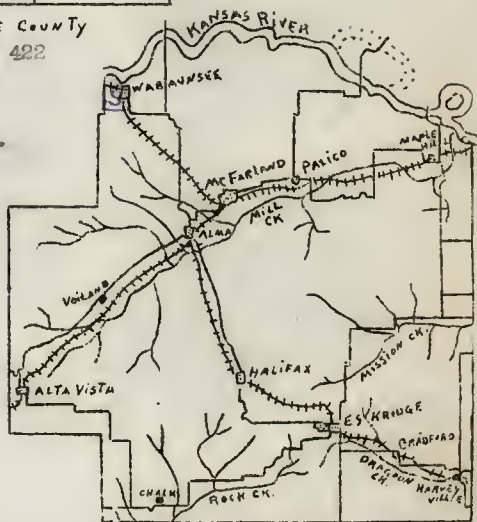
L.

WABAUNSEE COUNTY

Map No. 422

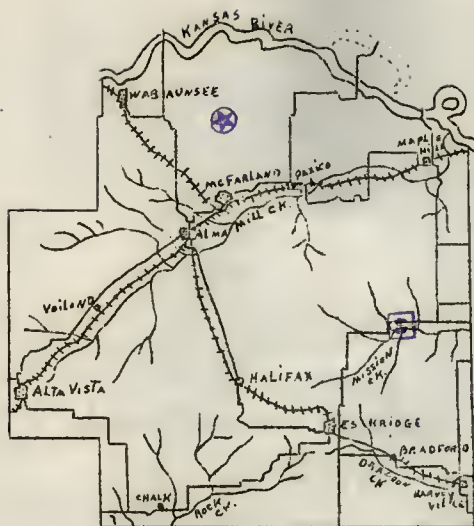
CAPRIFOLIACEAE

Triosteum perfoliatum L.



WABAUNSEE COUNTY

Map No. 423



CAPITOLIACEAE

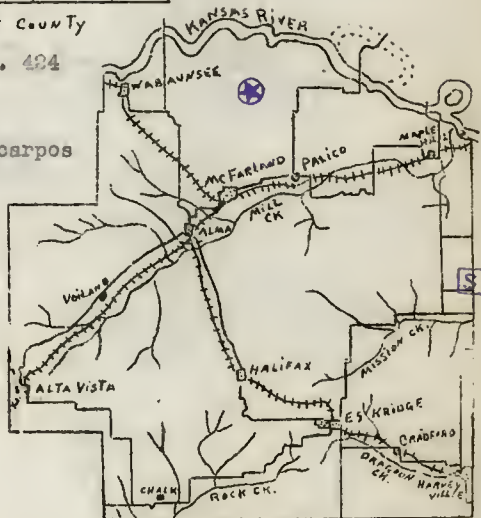
Sambucus canadensis L.

WABAUNSEE COUNTY

Map No. 424

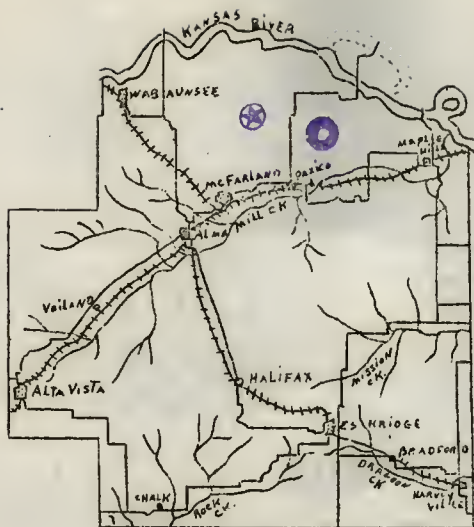
Symphoricarpos symphoricarpos

(L.) MacM.



WABAUNSEE COUNTY

Map No. 425



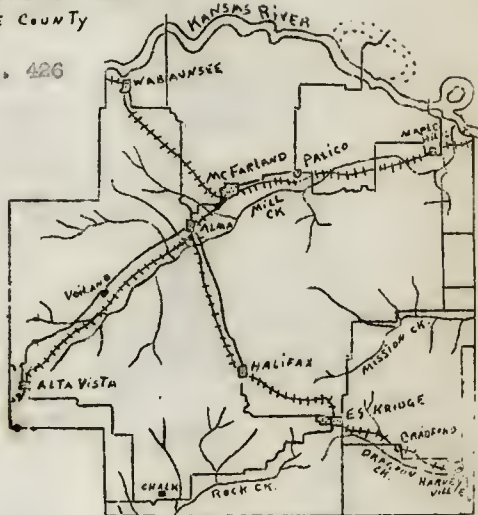
LOBELIACEAE

Lobelia leptostachys

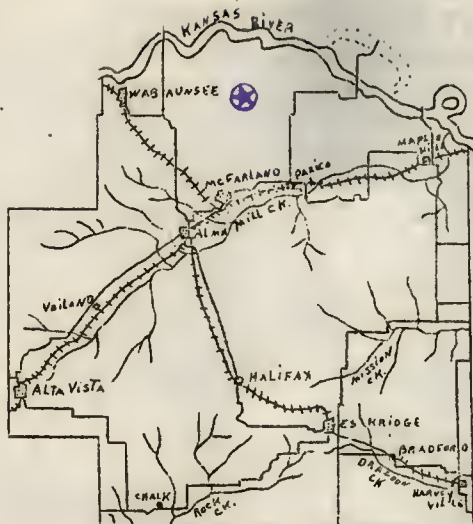
A. DC.

WABAUNSEE COUNTY

Map No. 426



WABAUNSEE COUNTY



CAMPANULACEAE

Campanula americana L.

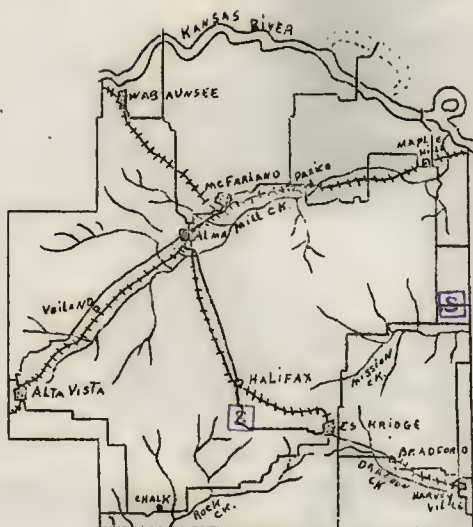
WABAUNSEE COUNTY
Map No. 427

Specularia perfoliata (L.)

A. DC.

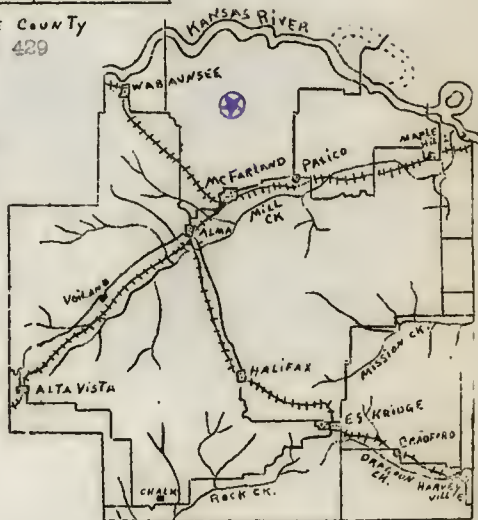


WABAUNSEE COUNTY
Map No. 428



WABAUNSEE COUNTY
Map No. 429

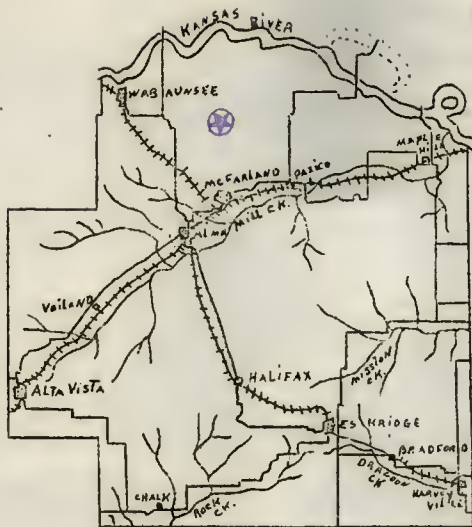
Sonchus asper (L.) Hill



WABAUNSEE COUNTY
Map No. 430

CICHORIACEAE

Lactuca spicata (Lam.) Wats.



WABAUNSEE COUNTY

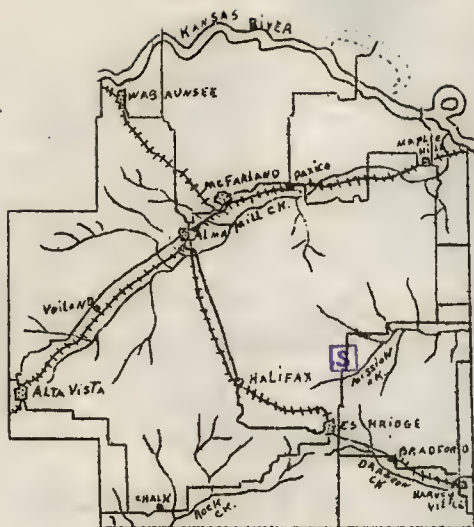
Map No. 431

Lactuca floridana (L.) Gaertn.



WABAUNSEE COUNTY

Map No. 432



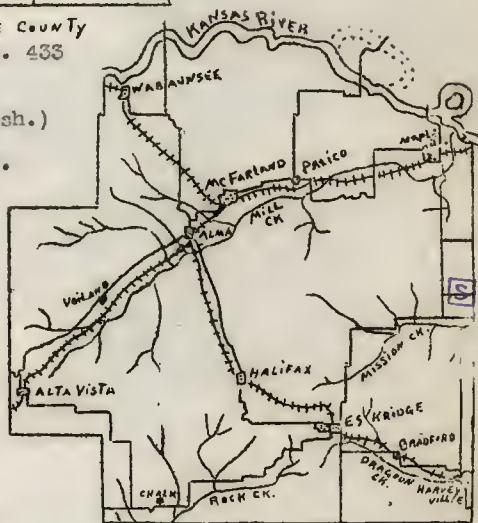
CICHORIACEAE

Tragopogon pratensis L.

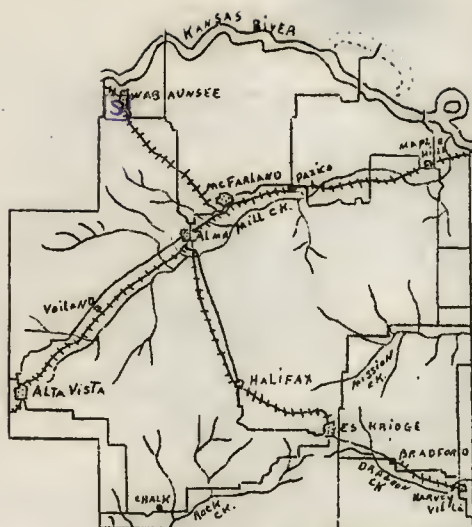
WABAUNSEE COUNTY
Map No. 433

Agoseris cuspidata (Pursh.)

D. Dietr.



WABAUNSEE COUNTY
Map No. 434



ICHORIACEAE

Senecio plattensis Nutt.

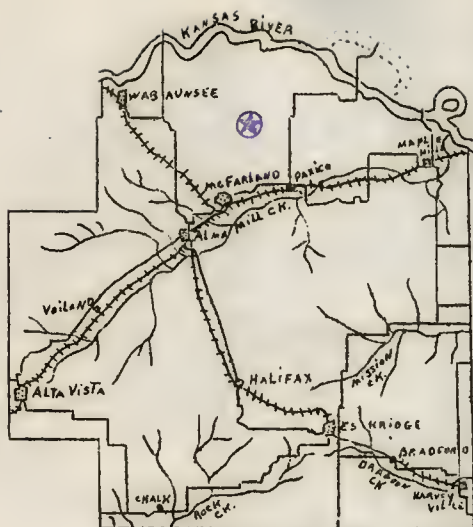
WABAUNSEE COUNTY
Map No. 435

Serinia oppositifolia Raf.

Kuntze



WABAUNSEE COUNTY
Map No. 436



COMPOSITAE

Ridan alternifolius

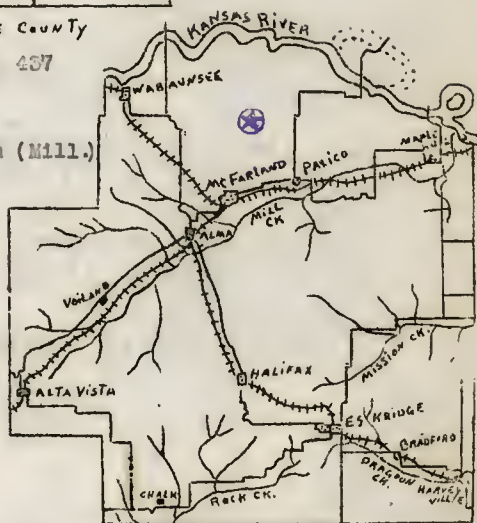
(L.) Britton

WABAUNSEE COUNTY

Map No. 437

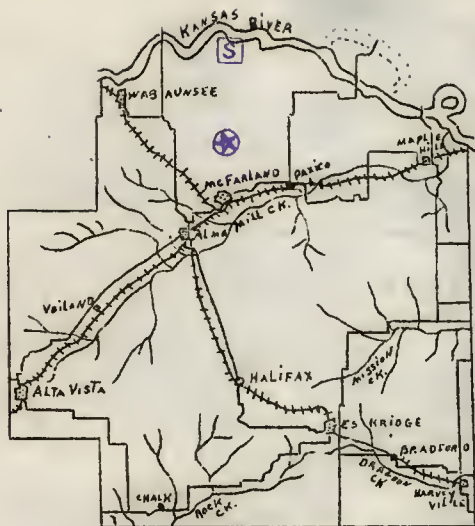
Xanthium pennsylvanicum (Mill.)

Wallr.



WABAUNSEE COUNTY

Map No. 438



WABAUNSEE COUNTY
Map No. 439

COMPOSITAE

Antennaria campestris

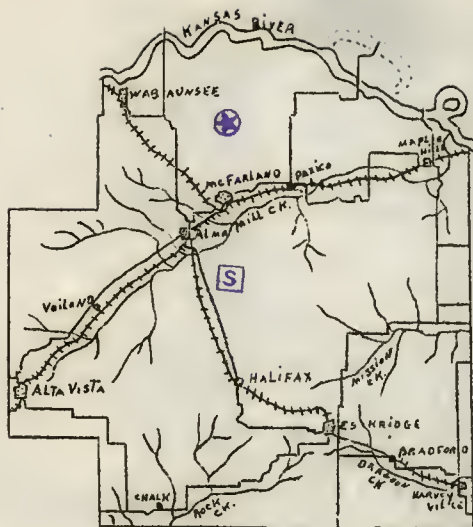
Rydb.

Antennaria neglecta Greene



WABAUNSEE COUNTY

Map No. 440



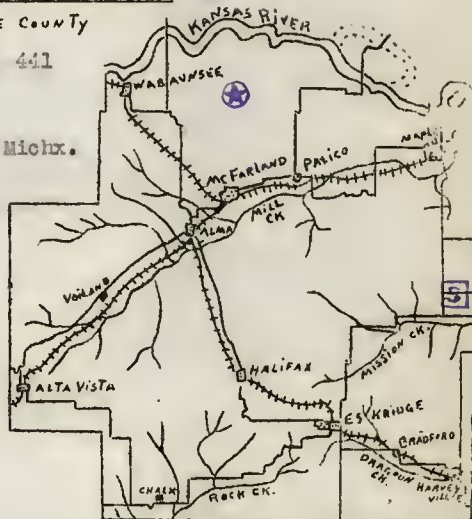
COMPOSITE

Silphium laciniatum L.

WABAUNSEE COUNTY

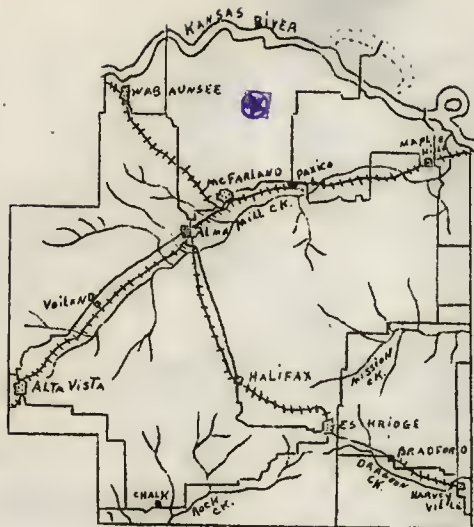
Map No. 441

Silphium integrifolium Michx.



WABAUNSEE COUNTY

Map No. 442



COMPOSITAE

Grindelia squarrosa

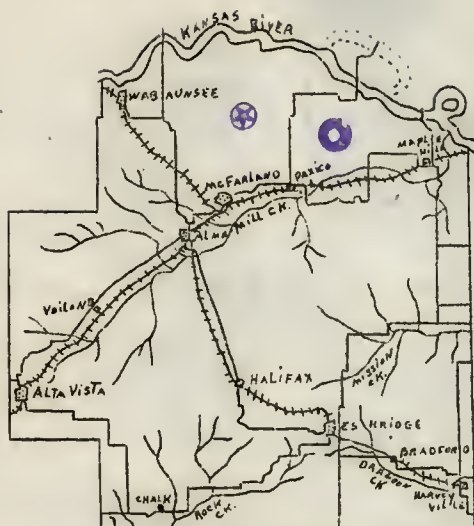
(Pursh) Dunal.

WABAUNSEE COUNTY
Map No. 443

Chrysanthemum leucanthemum L.



WABAUNSEE COUNTY
Map No. 444



COMPOSITAE

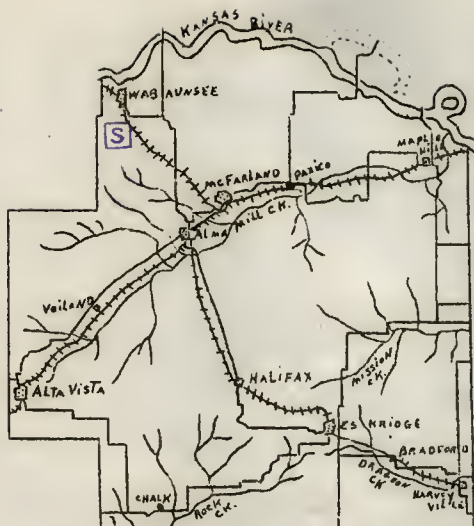
Leontodon taraxacum L.

WABAUNSEE COUNTY
Map No. 445

Heliopsis scabra Dunal.



WABAUNSEE COUNTY
Map No. 446

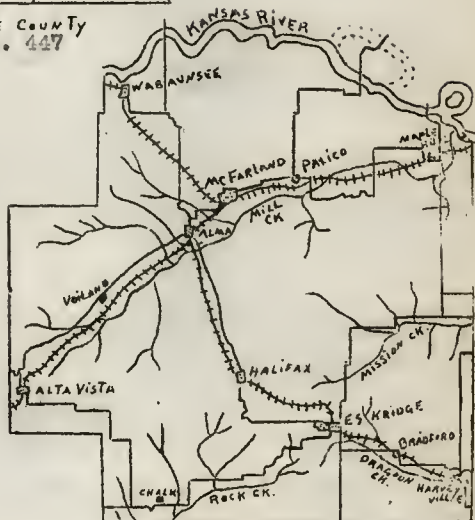


COMPOSITE

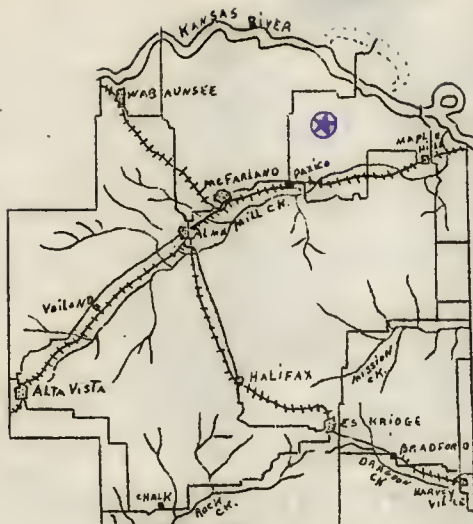
Artemisia kansana

Britton

WABAUNSEE COUNTY
Map No. 447



WABAUNSEE COUNTY



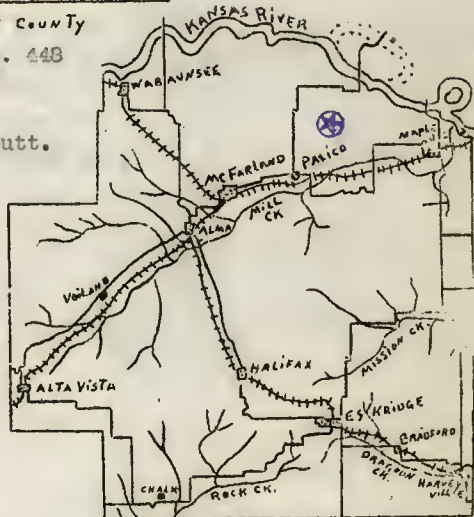
COMPOSITAE

Artemisia dracunculoides Pursh.

WABAUNSEE COUNTY

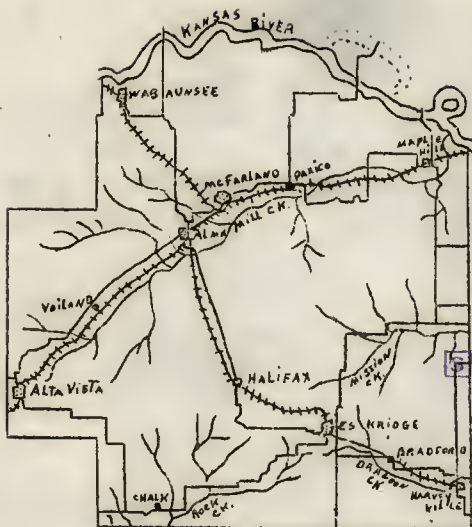
Map No. 448

Artemisia gnaphalodes Nutt.



WABAUNSEE COUNTY

Map No. 449



COMPOSITAE

Artemisia ludoviciana

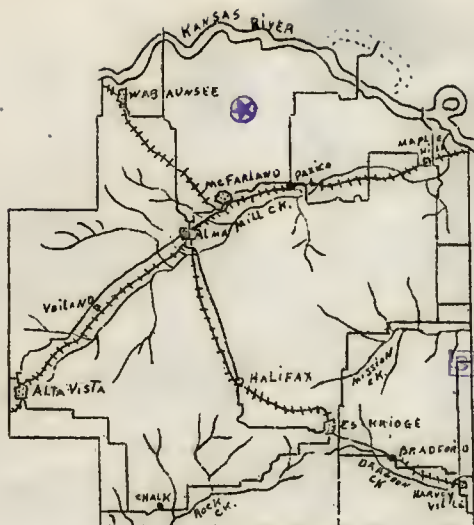
Nutt.

WABAUNSEE COUNTY
Map No. 450

Cirsium lanceolatum (L.) Hill.



WABAUNSEE COUNTY
Map No. 451

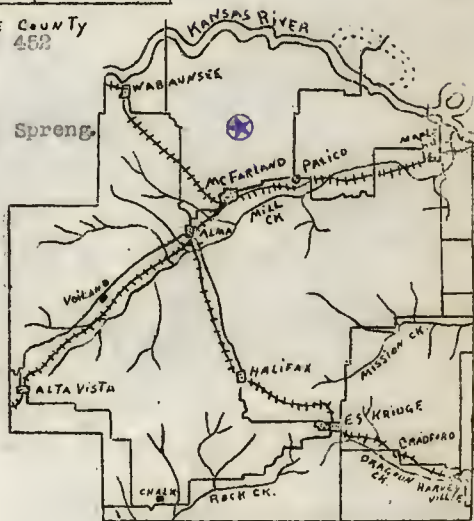


Cirsium undulatum (Nutt.)

Spreng.

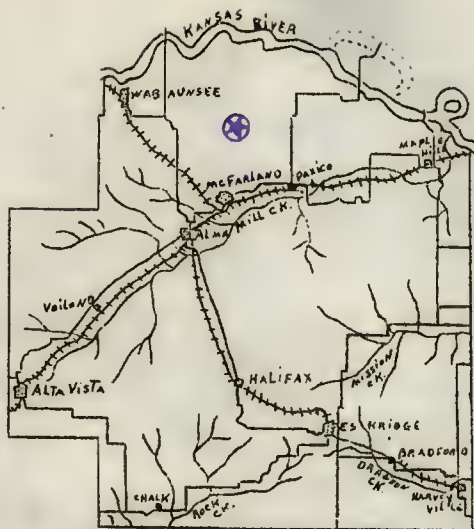
WABAUNSEE COUNTY
Map No. 452

Cirsium altissimum (L.) Spreng.



WABAUNSEE COUNTY

Map No. 453



COMPOLIAL

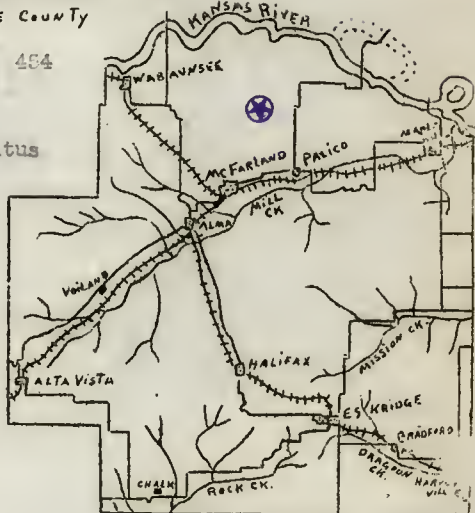
Helianthus annuus L.

WABAUNSEE COUNTY

Map No. 484

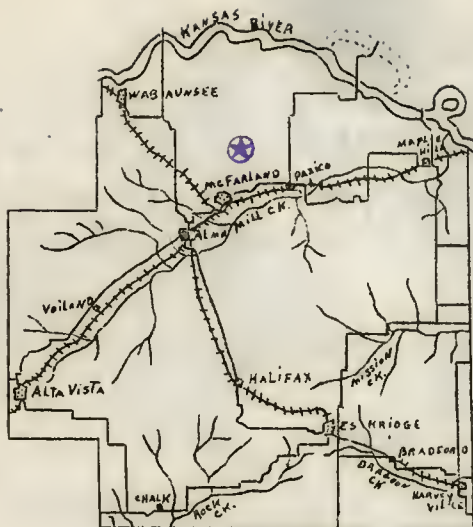
Helianthus grosse-serratus

Martens.



WABAUNSEE COUNTY

Map No. 485



WABAUNSEE COUNTY

Map No. 436

Melianthus laevis DC.



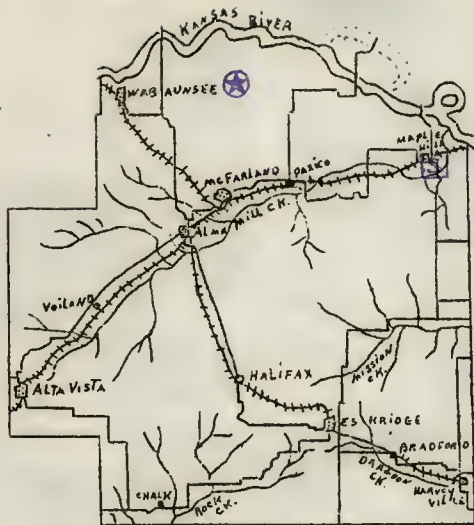
WABAUNSEE COUNTY

Map No. 437

COMPOSITAE

Melianthus laevis

Schrad.



COMPOSITE

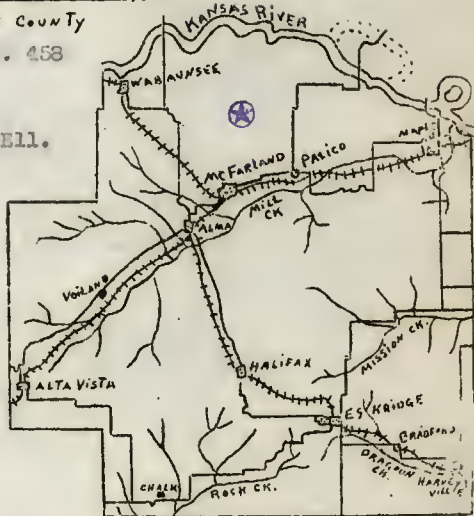
Helianthus petiolaris

Nutt.

WABAUNSEE COUNTY

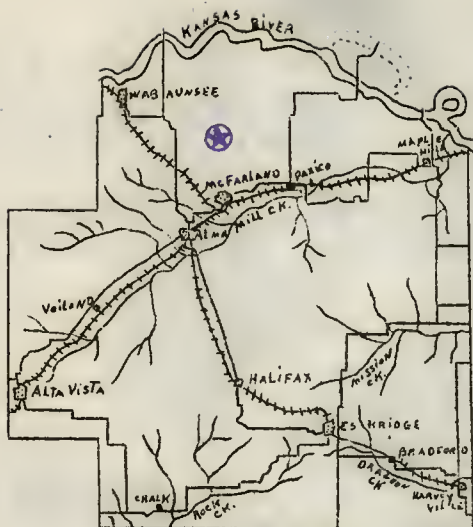
Map No. 458

Helianthus scaberrimus Ell.



WABAUNSEE COUNTY

Map No. 459



CONFIDENTIAL

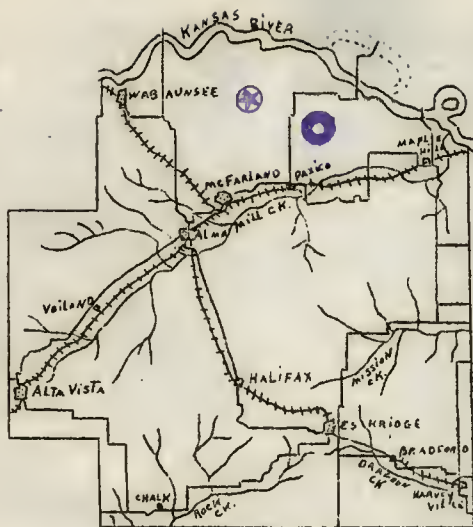
Ambrosia elatior L.

WABUNSEE COUNTY
Map No. 450

Ambrosia psilostachya DC.



WABUNSEE COUNTY
Map No. 461



COMPOSITAE

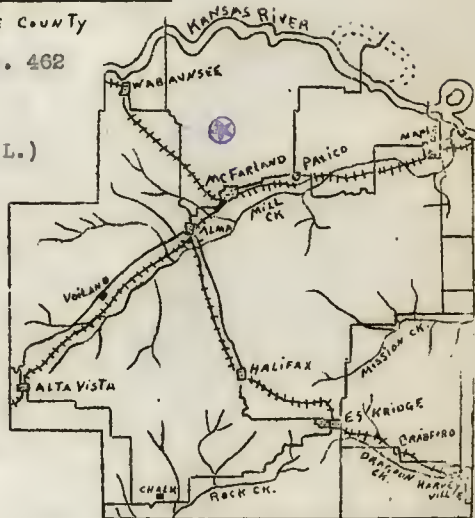
Ambrosia trifida L.

WABAUNSEE COUNTY

Map No. 462

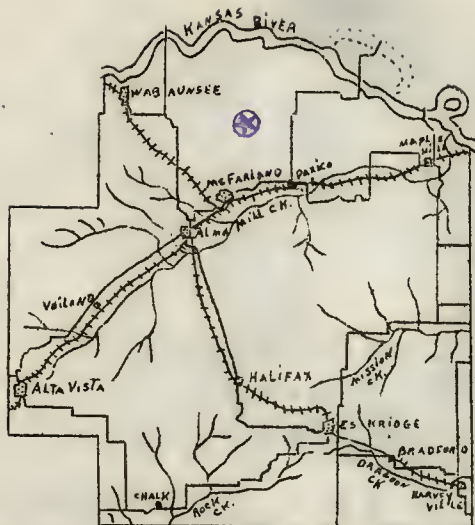
Euthamia graminifolia (L.)

Nutt.



WABAUNSEE COUNTY

Map No. 463



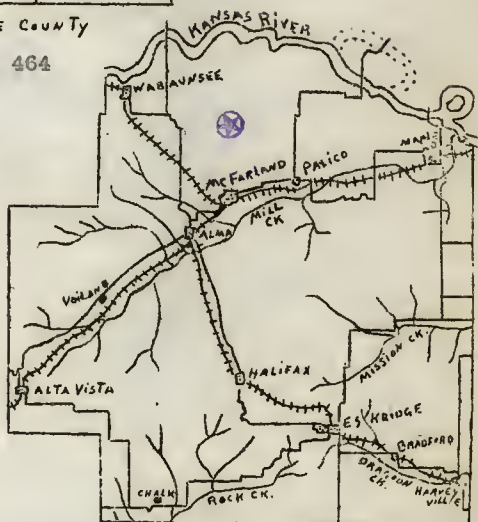
COMPOSITAE

Aster laevis L.

WABAUNSEE COUNTY

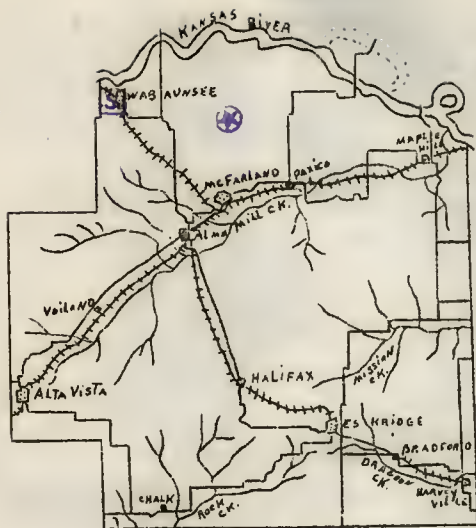
Map No. 464

Aster multiflorus Ait.



WABAUNSEE COUNTY

Map No. 465



COMPOSITAE

Achillea millefolium

L.

WABAUNSEE COUNTY

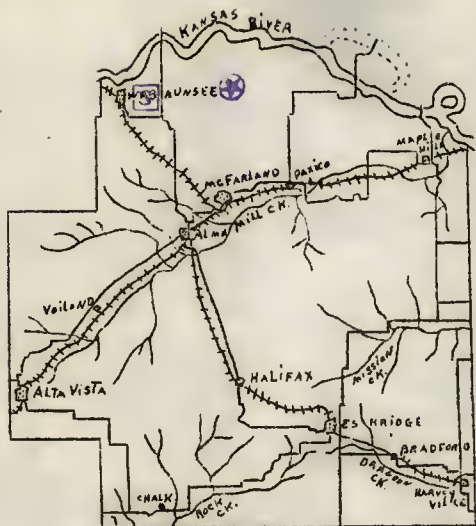
Map No. 468

Erigeron philadelphicus L.



WABAUNSEE COUNTY

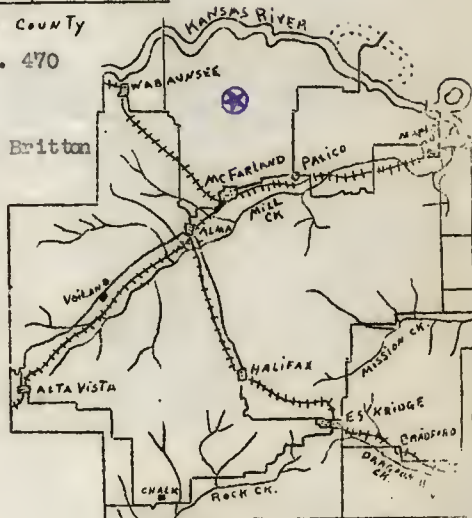
Map No. 469



WABAUNSEE COUNTY

Map No. 470

Leptilon canadense (L.) Britton



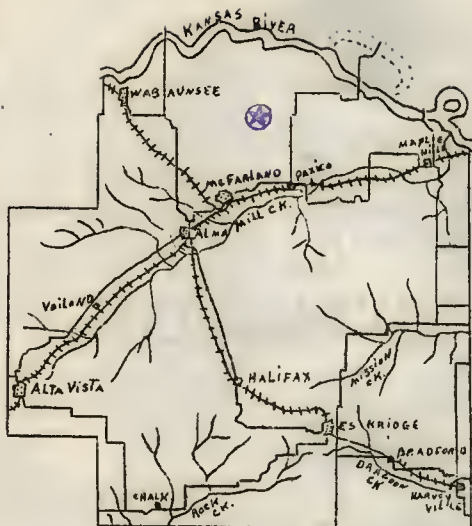
WABAUNSEE COUNTY

Map No. 471

COMPOSITAE

Prigeron ramosus

(Walt.) BCP.



COMPOSITAE

Eupatorium altissimum

L.

WABAUNSEE COUNTY

Map No. 472

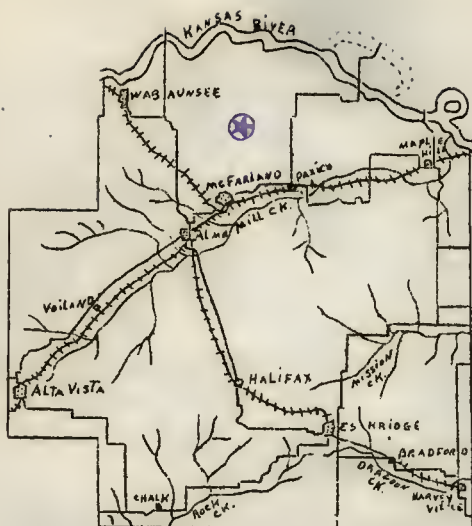
Eupatorium urticaefolium

Reichard



WABAUNSEE COUNTY

Map No. 473



WABAUNSEE COUNTY
Map No. 474

COMPOSITAE

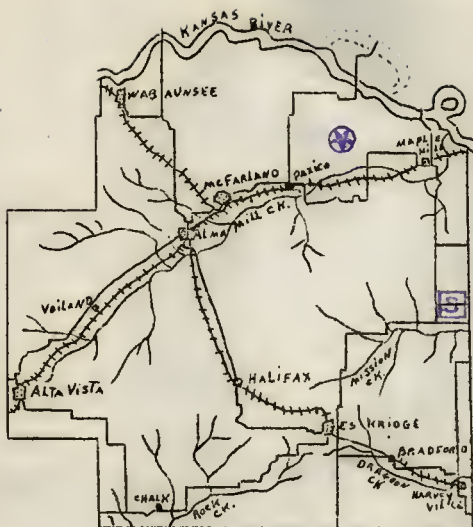
Liatris punctata

(Hook) Kuntze

Liatris var. *squarrulosa*
Michx.



WABAUNSEE COUNTY
Map No. 475



COMPOSITAE

Brauneria pallida

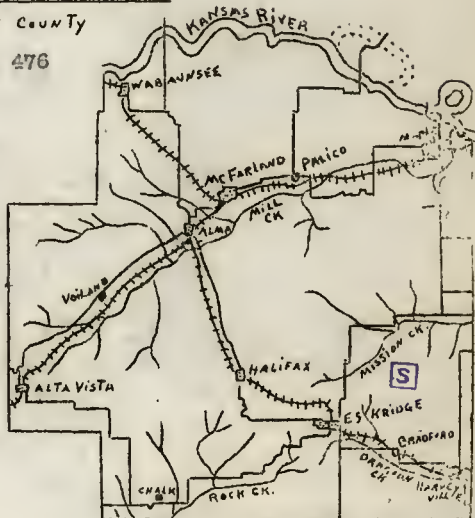
(Nutt.) Britton

WABAUNSEE COUNTY

Map No. 476

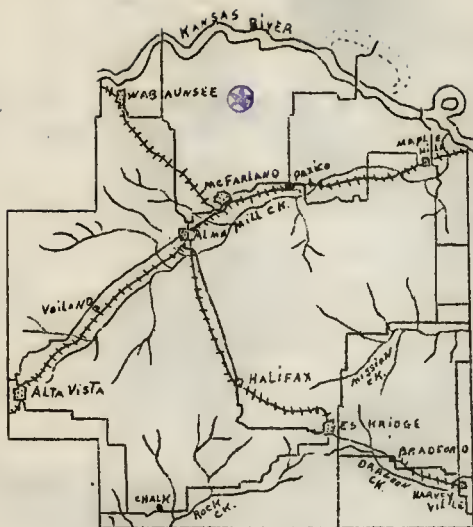
Brauneria purpurea (L.)

Moench.



WABAUNSEE COUNTY

Map No. 477



COMPOSITAE

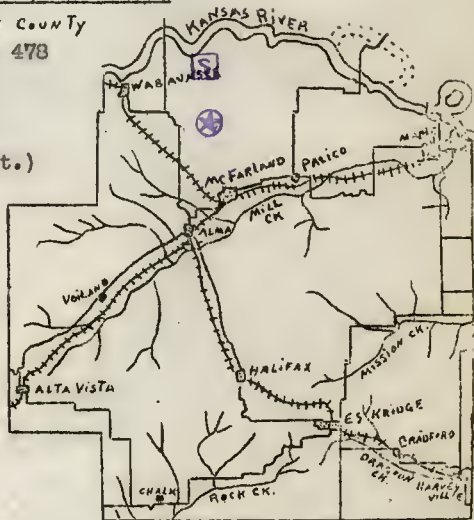
Mesadenia atriplicifolia

(L.) Raf.

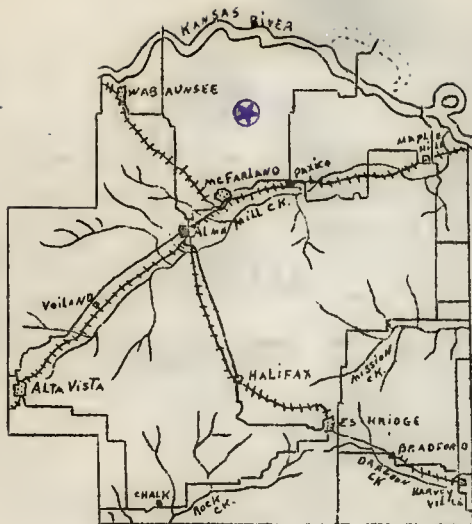
WABAUNSEE COUNTY
Map No. 478

Mesadenia tuberosa (Nutt.)

Britton.



WABAUNSEE COUNTY
Map No. 479



COMPOSITAE

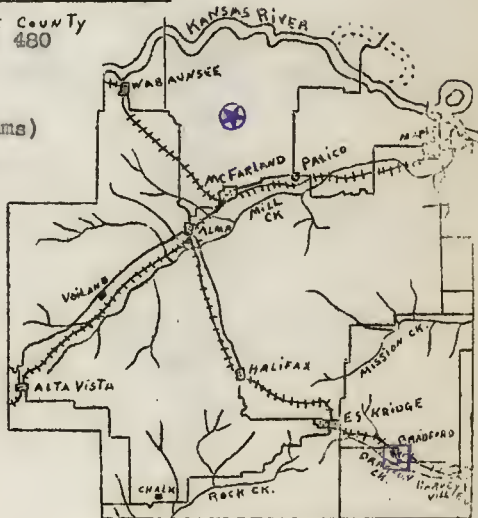
Ratibida pinnata

(Vent.) Barnhart

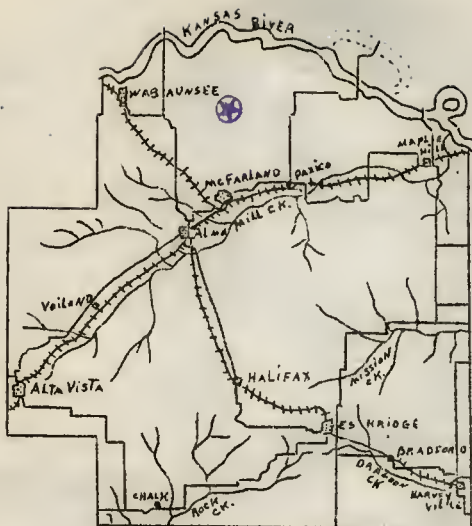
WABAUNSEE COUNTY
Map No. 480

Ratibida columnaris (Sims)

D. Don.



WABAUNSEE COUNTY
Map No. 481



COMPOSITAE

Veronia baldwinii Torr.

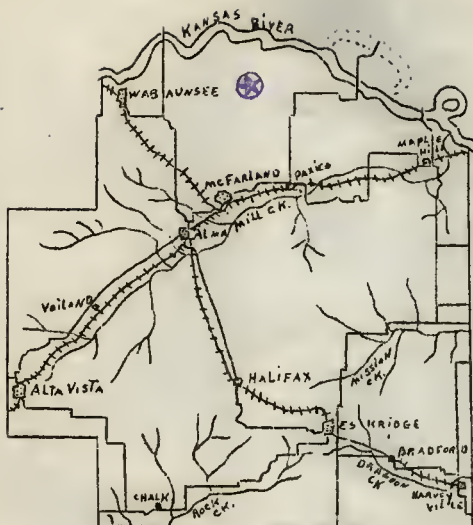
WABAUNSEE COUNTY
Map No. 482

Veronia fasciculata Michx.



WABAUNSEE COUNTY

Map No. 483



COMPOSITAE

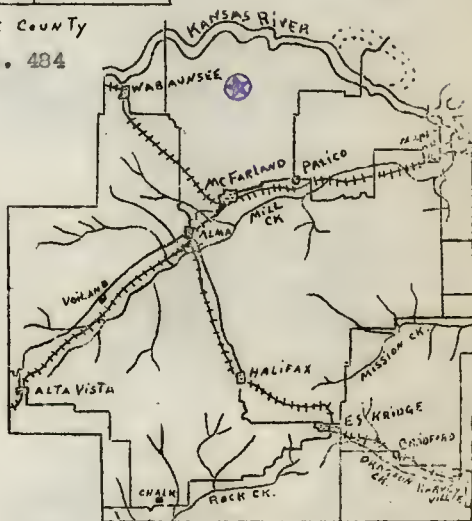
Kuhnia eupatorioides

L.

WABAUNSEE COUNTY

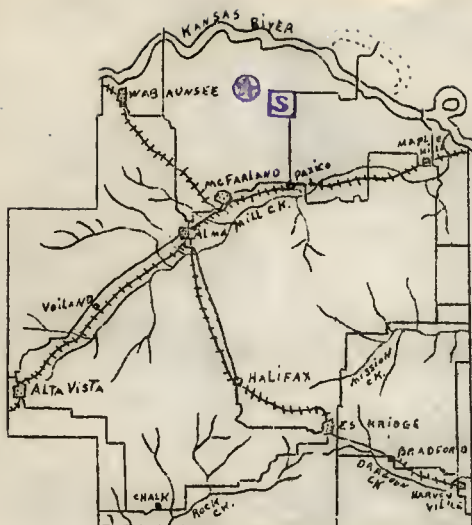
Map No. 484

Rudbeckia hirta L.



WABAUNSEE COUNTY

Map No. 485



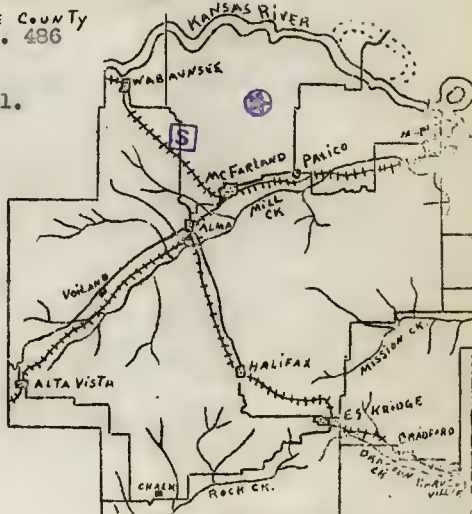
COMPOSITAE

Solidago missouriensis

Nutt.

WABAUNSEE COUNTY
Map No. 486

Xanthium americanum Mill.



WABAUNSEE COUNTY
Map No. 487